

from Cape Ray to the Bamean Islands,—on the W and N coasts of said Newfoundland from the said Cape Ray to the Quirpon Islands,—on the shores of the Magdalen Islands, and also on the coasts, bays, harbours, and creeks from Mount Joly,—on the S coast of Labrador, to and through the straits of Belle-Ile, and thence N indefinitely along the coast,—without prejudice, however, to any of the exclusive rights of the Hudson's Bay company; and that the American fishermen shall also have liberty for ever to dry and cure fish in any of the unsettled bays, harbours, and creeks of the S part of the coast of Newfoundland here above described, and off the coast of Labrador; but so soon as the same or any portion thereof shall be settled, it shall not be lawful for the said fishermen to dry or cure fish at such portion so settled, without previous agreement for such purpose with the inhabitants, proprietors, or possessors of the ground. And the United States hereby renounce for ever any liberty heretofore enjoyed or claimed by the inhabitants thereof to take, dry, or cure fish, on or within 3 marine miles of any of the coasts, bays, creeks, or harbours of His Britannic Majesty's dominions in America not included within the above-mentioned limits. Provided, however, that the American fishermen shall be admitted to enter such bays or harbours for the purpose of shelter and of repairing damages therein, of purchasing wood, and of obtaining water, and for no other purpose whatever. But they shall be under such restrictions as may be necessary to prevent their taking, drying, or curing fish therein, or in any other manner whatever abusing the privileges hereby reserved them." By a strict yet fair construction of this article, fishing-vessels of the United States are precluded from entering into the bays or harbours of the British provs., except for the purposes of shelter, repairing damages, and obtaining wood and water. A bay, as is usually understood, is an arm or recess of the sea entering from the ocean between capes or headlands, and the term is applied equally to small and large tracts of water thus situated. It is common to speak of Hudson's-bay or the bay of Biscay, although they are very large tracts of water; and the British authorities rightly argue that England has a right to draw a line from headland to headland, and to capture all American fishermen who may follow their pursuits inside of that line. In 1841 the legislature of Nova Scotia proposed a case for the consideration of the advocate-general and attorney-general of England, upon the true construction of this article of the convention. The opinion delivered by these officers of the Crown was, that "by the terms of the convention American citizens were excluded from any right of fishing within three miles from the coast of British America, and that the prescribed distance of 3 m. is to be measured from the headlands or extreme points of land next the sea or the coast, or of the entrance of bays or indents of the coast, and that consequently no right exists on the part of American citizens to enter the bays of Nova Scotia, there to take fish, although the fishing, being within the bay, may be at a greater distance than 3 m. from the shore of the bay, as we are of opinion that the term 'headland' is used in the treaty to express the part of the land we have before mentioned, including the interior of the bays and the indents of the coast." It is this construction of the intent and meaning of the convention of 1818 for which the colonies have contended since 1841, and which they now desire shall be enforced.

Seal fishery.] The capture of the seal for the sake of its skin, and the oil that is produced from its fat, either by means of nets along its shores, or by vessels proceeding to the fields of ice that annually drift from the arctic regions, has been an object to the inhabitants of N. from its earliest settlement. The prosecution of the seal-fishery by vessels is quite of a modern date, it being only 59 years ago that the first vessel sailed on this expedition, and it has in this short period arrived at its present extent, and now gives employment to near 11,000 men, actually engaged in catching the seal, and employs 340 vessels = 29,800 tons. It also gives employment to almost every class of mechanics, as well as common labourers, in manufacturing the produce of the seals. The usual time of leaving for the ice is from the 1st to the 10th of March, if the vessels can get out. The crews are shipped on shares, each man being directly interested in the quantity of seals caught. They pay the owner a sum varying from 10s. to 35s. for being allowed to proceed in the vessel, which is called 'berth-money'; each man has to find a gun, or to pay the hire of one, and also has to find 25 sticks of firewood for fuel while on the voyage. The owner of the vessel receives one-half of the seals brought home in the vessel, for fitting her out, &c., with all necessary material; the other half is taken by the crew, and equally divided among them according to the number, the owner receiving the master's share, who is paid by the owner 4d. to 6d. for each seal the vessel brings in, or is, to 1s. 3d. per cwt., according to the agreement that may be made between them previous to the commencement of the voyage. The vessels in Conception bay are insured in mutual societies, that is, a certain number of owners enter into an agreement with each other that they will pay all losses that may occur to each other's vessels during the season.

Commerce.] In 1812, the exports from this colony amounted to £705,594. In 1838, the average amount of exports and imports was about £1,500,000. The value of the imports in 1839 was £1,433,474, and that of the exports was £701,839. The ships which entered inwards in the latter year were 2,594 =

342,501 tons, with 16,214 men; the ships entered outwards, 2,605 = 381,577 tons, with 17,313 men. Of the vessels entered inwards, 542 were from Great Britain, 1,636 from British colonies, 380 from the United States, and 36 from foreign states; of the vessels entered outwards there were 772 for Great Britain, 1,549 for British colonies, 263 for the United States, and 1 for foreign states. In comparing the trade of 1842 with 1831, it appears that the total value of imports showed a decrease of £696,937: the amount for 1831 being £1,201,736; and for 1842, only £504,799. The total value of exports in 1841 was £591,088; in 1842, £383,627. The commercial statistics of the year ending 5th January 1850, exhibited the following results: The number of vessels entered inwards was 1,149 = 132,321 tons; outwards, 1,077 = 127,074 tons. The number of vessels owned in the island was 970 = 59,501 tons. New vessels built in 1849, 30, measuring 1,055 tons. The quantity of wine imported was 37,137 gals. The value of imports from Great Britain was £278,732; from British W. Indies, £6,003; from British N. America, £94,835; from the United States, £233,852; from other foreign countries £144,522, and from other British places £12,239. The total value of goods imported was £770,190. The value of exports was as follows: To Great Britain, £281,964; to the British W. Indies, £58,782; to British N. America, £49,139; to the United States, £20,859; to foreign states, £456,032; to other British places, £9,791. The total value of goods exported during the year 1849 was £876,567. It will be seen from this that the exports exceeded the amount of imports by upwards of £100,000. The quantity of dry cod fish exported from the island in 1849 was 1,175,167 quintals; of seal-oil, 4,190 tons of 240 gals.; of cod oil, 4,300 tons; of herrings, 11,471 barrels; of salmon, 5,911 barrels; and of seal-skins, 306,072 pieces. The imports of 1850 amounted in value to £867,316; the exports to £975,770, of which £928,427 was the produce of the fisheries alone, the remainder consisting almost entirely of articles imported for subsequent exportation. The quantity of oils and fish exported in 1850 was as follows:

Seal oil,	6,235 tons	19 gals.	£193,269
Blubber and dregs,	730 —	115 —	8,837
Unrefined cod oil,	3,107 —	251 —	93,241
Refined do.,	228 —	169 —	17,561
Seal-skins,	442,892	in number.	66,359
Dry cod,	1,089,182	cwt.	532,969
Caplin,	529	boxes.	132
Herrings,	19,556	barrels.	9,779
Salmon,	1,933	tierces	1,700 bar.
Fish sands,	240	kegs.	60

£928,427

The shipping which entered inwards in 1850 was 196 = 28,846 tons from Great Britain; 531 = 50,558 tons from the British colonies; 130 = 15,622 tons from the United States; and 343 = 43,602 tons from foreign states; in all, 1,220 ships = 138,628 tons, and navigated by 8,279 seamen.—The greater part of the trade of the colony being effected in barter, it is impossible to estimate accurately the amount of coin in circulation; but it has been conjectured to be from £80,000 to £100,000. British money and Spanish dollars are the coins in circulation, the latter established by the governor's proclamation at 4s. 4d. sterling, but passing current at 5s. The course of exchange varies according to circumstances and to the demand for bills to remit to England in payment of goods and merchandise imported into the colony, and generally highest in the autumn; and this demand is governed in a great measure by the result of the cod and spring seal-fisheries. If successful, remittances are made chiefly in oil; if otherwise, bills of exchange are remitted. The par of exchange

is 15½ per cent. currency premium. The exchange occasionally rises to 2 to 6 or 7 above par, but rarely falls below it. Weights and measures are according to the standard of England.

Population.] The pop. of N. rapidly increased during the war. The number of permanent inhabitants in 1816, according to official statement, was 70,000, principally Irish. In 1837, the pop. amounted to 75,094; of whom 37,376 were Roman Catholics; 26,748 Episcopalians; 10,636 belonged to various classes of Dissenters; and about 40 families consisted of Micmac Indians. Besides the resident pop. several thousand persons winter here, for the purpose of building and repairing vessels, and erecting scaffolds for drying fish. The census of 1845 returned the pop. at 96,295, of whom 34,281 were Episcopalians, and 46,785 Roman Catholics.

Government and Judicature.] In 1825, the king granted this prov. a charter by which was established a supreme court, from which an appeal lies to the sovereign in council. In 1832, a representative constitution was granted, in which the elective suffrage is conferred by one year's occupation of any description of dwelling. The gross annual revenue from imperial and colonial duties, quit-rents, &c., was in 1849, £69,405; in 1850, £82,653.—The supreme court is composed of a chief-justice at a salary of £1,200, and 2 assistant-judges each at a salary of £700. This court, which has jurisdiction throughout the whole government of N. and its dependencies, and on the seas and banks to which vessels resort for carrying on the fishery, and has all criminal and civil jurisdiction, sits only at St. John's, the capital of the island, at such times as the governor by his proclamation may appoint. All civil actions in which the matter in dispute exceeds 40s. are tried by jury. The practice on the common law side is in general the same as that of the court of queen's bench, modified by rules adapted to the circumstances of the colony. An appeal lies from the supreme court to the queen in council, where the matter in dispute exceeds £500. The island is divided into three judicial districts,—the central, northern, and southern,—within which, respectively, there is a superior court of record, styled the circuit court, held by the chief or one of the assistant judges of the supreme court. This court has the same powers within the district, as the supreme court throughout the whole island, save in cases of treason, capital felonies, and prosecutions for breach of the revenue laws. An appeal lies from the circuit courts to the supreme court in matters exceeding £50 sterling.—Courts of general and quarter sessions are also held at St. John's and the principal outports, the sittings of which are regulated by the governor's proclamation. The English criminal law being in force in the colony, these courts and the magistrates have jurisdiction and powers similar to those of the quarter sessions and justices of the peace in England. These courts are presided over by stipendiary magistrates, of whom there are 3 at St. John's at salaries of £300, 2 at Harbour-Grace at salaries of £180 and £150; and one at each of the 13 other outports, at salaries varying from £100 to £150.—There are three sheriffs, one for each of the judicial districts, at salaries of £750 for the central, £300 for the northern, and £200 for the southern district. The sheriffs are appointed annually by the governor.—There are 11 clerks of the peace appointed by the governor.—At various places throughout the island, there are in all, 66 paid constables, at an annual salary varying from £12 to £45.

Towns.] As fishing constitutes the main object for which N. is visited or occupied, the number of persons to be found on it varies greatly at different seasons of the year; formerly none except a few poor

families passed the winter here; even the governor himself, who was simply the commodore of the squadron appointed to protect the fishing-vessels, used to live on ship-board. For a long period, however, the number of wealthy residents has been progressively increasing; a considerable quantity of capital has been vested in permanent establishments; and the villages of N. are gradually emerging from the condition of bleakness and impurity in which they once stood. St. John's, Placentia, and Harbour-Grace, in Conception bay, have already the appearance of flourishing colonial towns. All three are in the SE portion of the island. St. John's is the seat of the governor, whose authority also extends over Anticosti, some smaller islands, and the adjoining coast of Labrador. Placentia was long a French settlement; both it and Harbour-Grace are greatly inferior to St. John's. The following table exhibits the statistics of pop. of the several districts into which the island is divided, as returned in 1845:

	Pop.	Rom. Cath.	Schools.	Chur.
St. John's,	25,196	18,986	52	21
Conception bay,	28,026	11,580	54	39
Trinity bay,	8,801	1,283	22	22
Bonaville bay,	7,227	1,809	17	14
Twillingate and Fogo,	6,744	1,128	10	12
Ferryland,	4,370	4,201	22	10
Placentia and St. Mary's,	6,472	5,455	11	13
Burin,	4,368	1,951	11	6
Fortune bay,	5,100	392	10	5
	96,295	46,785	209	142

Ecclesiastical affairs.] In 1839, this colony, with the Bermudas, was disjoined from the diocese of Nova Scotia, and erected into a separate see; but there are neither parishes nor rectors properly so called: the Protestant episcopal clergymen, 32 in number, are all missionaries under the Society for the propagation of the gospel. The Roman Catholics have 42 churches, and a cathedral at St. John's. Their establishment consists of a bishop and 24 clergymen.—Elementary schools are established in every district of the island, under separate and distinct boards of education, Roman Catholic and Protestant, in each district. According to the census of 1845, there were 209 such schools conducted by masters, with 9,042 pupils; and 358 conducted by mistresses, with 1,224 pupils. In addition to the government-schools, the Newfoundland School society and the Wesleyan Methodists have established schools. There is an academy at St. John's, and grammar-schools at Harbour-Grace and Carbonear.

History.] Cabot discovered N. in 1497. The land itself was of little value, but the fishery upon the neighbouring banks soon convinced the British that the possession of it was a matter of some consequence. The French, too, knew the value of the fishery as well as the British, and many disputes arose concerning N. At the peace of Utrecht, the possession of the island was confirmed to the English, but the French were allowed to dry their nets upon its N. shores. In 1763, their privilege of fishing was extended to the gulf of St. Lawrence, provided they should never approach within less than 3 leagues of the shores of British America; at the same time they obtained possession of St. Pierre and Miquelon, two small islands to the north of N.; but were prohibited from erecting fortifications, or from keeping upon them more than 50 soldiers. These privileges were continued by the treaty of 1814.

NEWFOUNDLAND, a village of Morris co., in the state of New Jersey, U. S., 93 m. N. of Trenton.

NEW FRANKLIN, a village of Scott co., in the state of Indiana, U. S., 81 m. S by E of Indianapolis.—Also a village of Paris township, Stark co., in the state of Ohio, 140 m. NE of Columbus, and on the line of Sandy and Beaver canal. Pop. in 1840, 150.

NEWGALL, a stream in Pembrokeshire, which takes its rise in a moor near Trethog, in St. Edrin's parish, and passing by Tankardston and Ewston, into a SSW direction, falls into St. Bride's bay. It is chiefly remarkable as one of the grand boundaries between the English and Welsh, for on one

side of it the barbarous English peculiar to the hundred of Roos is spoken, while on the other, in Dewislau, Welsh is spoken.

NEW GARDEN, a township of Chester co., in the state of Pennsylvania, U. S., 32 m. SW of Philadelphia and 74 m. ESE of Harrisburg. The surface is level, and is drained by Red Clay and White Clay creeks. The soil consists of calcareous loam. Pop. in 1840, 1,411.—Also a village of Guilford co., in the state of North Carolina, 98 m. WNW of Raleigh.—Also a village of Hanover township, Columbiana co., 150 m. NE by E of Columbus.—Also a township of Wayne co., in the state of Indiana, 78 m. E of Indianapolis. Pop. 1,890.

NEW GENEVA, a village of Springfield township, Fayette co., in the state of Pennsylvania, U. S., 196 m. W by S of Harrisburg, on Monongahela river, at the junction of George creek. Pop. in 1840, 400.

NEW GERMANTOWN, a village of Toboyne township, Perry co., in the state of Pennsylvania, U. S., 46 m. W of Harrisburg. Pop. in 1840, 150.

NEW GLASGOW, a village of Amherst co., in the state of Virginia, U. S., 119 m. W of Richmond, containing in 1840 about 25 dwellings.

NEW GLOUCESTER, a township of Cumberland co., in the state of Maine, U. S., 41 m. SW of Augusta, watered by Royal's river. It is very fertile, especially on the streams. Pop. in 1840, 1,946.

NEW GRANADA, the most important of the three republics into which the South American republic of Colombia resolved itself at the breaking up of that federation. See article **COLOMBIA**. It comprises the greater part of the old vice-royalty of New G., as it existed previous to 1810. The present republic is bounded on the N by the Caribbean sea; on the E by the republic of Venezuela; on the SE by Brazilian Guayana; on the S by the republic of Ecuador or Equator; and on the W by the Pacific ocean. On the NW it unites, by the isthmus of Panama, with Central America. It lies between the parallel of $12^{\circ} 30'$ N, and the equator; and between the meridians of $69^{\circ} 20'$, and $82^{\circ} 30'$. Its area has been estimated at 17,955 German, or 381,328 English sq. m.; and its pop. in 1850 at 2,138,000.

Physical features. Alpine regions and extensive plains divide between them the greater portion of this country. The western and larger portion of the region included within the boundaries now traced is traversed by several chains of the Andes, rising from elevated table-lands; the eastern portion belongs to the great llanos or plains of the Orinoco. Near the S frontier, at the sources of the Magdalena and Cauca, on the frontiers of Ecuador, the great chain of the Andes diverges into three distinct ridges. Of these, the eastern or Venezuelan ridge, which extends to the extremity of the Parian promontory in W long. 62° , divides the valley of the Rio-Magdalena from the immense plains watered by the Guaviari, Meta, and Apure, the three great western tributaries of the Orinoco. The highest summits of this chain, which nowhere rises to the region of perpetual snow, are those of Summa-Paz and Chingaza. The central chain, which terminates near Mompox, divides the valley of the Rio-Magdalena on the E from that of the Cauca on the W; and is the highest of the three, often attaining the limits of perpetual snow, and greatly surpassing it in the colossal summits of Gouanacas, Barragan, and Quindiu. The western chain separates the valley of Cauca from the prov. of Choco and the coasts of the Pacific, and about the parallel of 6° N lat. bends to the NNW. Its highest elevation is scarcely 5,000 ft.; and it sinks so low in its progress northward, that its course can scarcely be traced into the dep. of Panama, where it forms mountainous land only 1,200 ft. in height. The

mean elevation of the Andes in New G. is about 11,000 ft. Their alt. is greatest towards the equator. See article **ANDES**. The valleys between these chains form the great plateau of New G., upon which the population is chiefly concentrated. The llanos or plains commence at the foot of the Eastern Andes and extend thence into the Venezuelan territories. They bear all the characteristics of their tropical position, but are as yet scarcely redeemed from their primitive solitude and wilderness state.

Rivers. The principal river is the Magdalena, which intersects the country from N to S in a course of nearly 900 m.; and is joined by the Rio-Cauca on the l. bank a little below Mompox. The Magdalena is called the Rio Grande, or 'Great river,' by the Spaniards. It rises in the prov. of Popayan, in a small lake called Papas, in N lat. $1^{\circ} 50'$, and W long. $75^{\circ} 30'$, in the angle formed by the eastern and the central chain of the Andes. At the distance of 210 m. from its source, it receives the river of Bogota, 35 m. SW of the capital; 200 m. farther down, it receives the Sogamozo formed by the junction of two large streams from the eastern ramification of the Andes, which separates all the streams which run W into the Magdalena from those which flow E to the Orinoco; 150 m. farther onwards it receives on the opposite or l. bank the large stream of the Cauca; and 150 m. below, it enters the Caribbean sea, or Atlantic, by several deltoid branches. At its mouth it is 2 leagues broad; and the current is so rapid that large vessels cannot go up the stream, but are obliged to discharge their goods into canoes, which are towed along the banks, and occupy two months in their passage to where it ceases to be navigable, though they are only three weeks in coming down. Like other tropical rivers, the M. is subject to great inundations. See article **MAGDALENA**.—The Cauca rises on the W side of the central ridge of the Andes, which divides it from the valley of the Magdalena, in N lat. $2^{\circ} 34'$, at the pass of Guanacas, within 100 fath. of a source of the Magdalena. Up to the parallel of 8° N, its course is nearly parallel with that of the Magdalena, into which it falls after a course of more than 600 m. See article **CAUCA**.—The lakes of New G. are of considerable extent. The most celebrated is that of Guatavita near Bogota. Some extensive salt-marshes occur on the NW coast. The head-branches of the Amazon water the SE part of the country.

Climate. The climate resembles that of Mexico: hot and unhealthy on the low coast, but gradually cooling as we ascend to the table-land. At Cartagena, on the N coast, the rainy season lasts from May to November; from April to December, the heats are terrible and destructive. At Santa Marta, on the same coast, the climate is more cool and healthy. At Popayan, in the extreme S and interior, the driest months are June, July, and August. At Bogota, the climate is cold considering its latitude, but still it may be deemed a perpetual spring. In the Llanos the mean temp. is 80° . See article **ECUADOR**.

Productions. The forests of New G. are rich in dye-woods and cabinet-woods. Cinchona or Peruvian bark is collected near the sources of the Magdalena and the Cauca. The famed balsam of Tolu is so called from a village in the neighbourhood of Cartagena. The best cochineal is from the banks of the Sogamozo. The great variety of soil and climate renders the culture of both tropical as well as northern staples practicable. Coffee, cotton, cocoa, indigo, sugar, and tobacco, flourish in the savannas E of the Andes, and are considered as articles of export; the grain and nutritious roots, known in the W. Indies as ground-provisions, are produced only in sufficient quantities for home-consumption. Maize is grown every where, and when ripe is pounded in wooden mortars into a coarse meal, there being no more perfect machinery for grinding it. Wheat is grown on the higher lands, and on the elevated mountain-plains, where it suc-

ceeds as well as in the W parts of the United States, and often yields 40 bush. to the acre, and two crops may be produced in the year. A substitute for bread is found in cassava, which is procured by a process similar to that for making starch, from the yuca root. The plantain is, to the mass of the natives, what the potato has become to the poor of Ireland; but the rice of the lowlands of New G. is indifferent. Coffee is chiefly cultivated in the province of Santa-Marta, but its culture is conducted with less care than in the W.-India islands. Cotton is chiefly grown in Cartagena, on the newly-cleared lands, between successive crops of maize, but the produce is said to be inferior to that from the uplands of North America, which is, in a great measure, owing to the defective mode generally followed of cleaning and depriving it of the seed. The growth of this article for export is very insignificant. The works erected in different parts of the country for the manufacture of sugar, were mostly destroyed during the revolutionary struggle, and very few of them have been repaired. No sugar is now exported, and the half-inspissated juice of the cane is only used for confectionary, or is eaten by the natives with their chocolate.—Previous to the discovery of the country, horses and cattle were unknown in these regions; but since their introduction, they have increased to such an extent as to form one of the great articles of export. Sheep and goats are numerous on the rich plains of Bogotá, and animal food is cheap, and much consumed; and hides, wool and cheese, form a principal portion of rural produce. Still, amidst all this exuberance of nature, agriculture is so imperfectly understood, and so languidly pursued, that not the thousandth part of the produce which this country might readily yield is raised. A traveller is astonished at finding the plantations of a region perhaps the most lovely and luxuriant in the world so trifling and unproductive. A planter is here thought rich, whose annual income is from £900 to £1,000. So little attention is paid to agriculture in the prov. of Choco, to the W of the Cauca, between Antioquia and Darien, that it still remains nearly in the same uncultivated state as when first discovered.—a thick impervious forest, without pasturage and roads. A variety of causes co-operate to produce this state of things, throughout the Colombian republics, such as the high interest of money, and the number of mortgages with which every plantation is more or less burdened. The pious legacies and prebends with which many estates were encumbered was also another serious obstacle to agriculture. These, accumulating from generation to generation, could not be bought up by payment of the capital, and the planter was thus kept under perpetual obligation to pay the interest. An ordinance was enacted in 1802, against such pious donations; and recent reforms aim at the extinction throughout the republic of the heavy impost of clerical fees. Another obstacle to colonial prosperity under the old regime, and perhaps as much so under the new system of things, was the passion for public employments. The prospect of unbounded wealth from a large and rich plantation could never induce a Spaniard to relinquish his desire of military rank, of a judicial office, or of the cross of an order.

Minerals. The viceroyalty of New G. has always been celebrated for the abundance of its gold; in Antioquia and other districts, no other money is known. This metal is generally obtained from the *lajas*, or washing-places established in alluvial grounds. These *lajas* are situated to the W of the central Cordillera, in the provinces of Antioquia and Choco, in the valley of the Cauca, and on the coast of the Pacific, in the parishes of Barbacoas. The prov. of Antioquia contains mines of gold in micaceous slate, at Baritosa, San-Pedro, and near Almas; but they are not wrought for want of hands. Gold is collected in great abundance on the alluvial grounds of Santa-Rosa, in

the Valle-d'Ormas, and the Valle-de-Trinidad. At Choco, the richest river in gold is the Rio-Andagada; which, with the rivers of Quito, and Zizara, forms near Quibdo, the Rio-Atrato or River of Darien. All the ground between the Andagada, the Rio-de-San-Juan, the Rio-de-Jamana, and the Rio-de-San-Augustin, is auriferous. The number of slaves employed in gathering gold-dust in the district of Choco, amounted in 1778 to 3,000, and in the valley of the Cauca, to 8,000. The prov. of Choco might alone, it has been estimated, produce 20,000 marks of gold annually, from washing, if in peopling this region—the most fertile in New G.—the government would turn its attention to agriculture. In 1801, when Humboldt was at Bogotá, the total produce of the gold-mines of the viceroyalty was estimated at 2,500,000 dollars, or £562,500; namely, 2,100,000 d., or £472,000, for the two mints of Santa Fé and Popayan; and 400,000 d., or £80,000, as the exportation of the ingots and wrought gold. In addition to this, might be added the fraudulent export of gold of Choco, which has much increased since the navigation of the Rio-Atrato was declared free. Gold dust, and even ingots, instead of being conveyed by Call or Mompo, to the mints of Santa-Fé or Popayan, now take the direct road to Cartagena and Porto-Bello, whence they flow into the British colonies or are shipped direct for England. The mouths of the Atrato and Sinu serve as stations for smugglers. According to Humboldt's information from those who dealt in gold dust, at Cartagena, Mompo, Puga, and Popayan, the smuggled gold might be estimated at 2,500 marks, or £82,062 annually. The total produce of the gold of this viceroyalty, coined, exported in ingots and wrought plate, together with that of fraudulent exportation, was estimated at 20,800 marks fine gold, or £683,760.—Platina, the rarest and most infusible of all metals, and in value next to gold, is produced in Choco and Barbacoas, to the W of the freestone mountains which rise on the W banks of the Cauca. There are some mines of extremely rich silver in the Vega-de-Supia, 20 leagues distant from Cartago, to the N of Quebradonia, between the Cerro-de-Tacon and the Cerro-de-Marmaton. These mines were only discovered of late. There are also mines of cinabar, or sulphurated mercury, in three different places,—namely, in the province of Antioquia, in the valley of Santa-Rosa, to the E of the Cauca, in the mountain of Quindiu formerly mentioned, and lastly, in the prov. of Quito, between Azuque and Guenaca.—New G. abounds in precious stones. Amethysts, *pantanas*—a kind of precious stone of various colours, with grains of gold in the interior—diamonds of a very small size, jacinths, beautiful garnets, turquoises, girasols, obsidian, and *mapulas*, another little-known precious stone, are found. There are mines of emeralds in the vicinity of Maza, a town in the district of Tunja, inhabited by about 200 families, who are chiefly occupied in searching for emeralds. They occur in the mountain of Itoco, within 3 leagues of Maza, and 50 m. N of Santa Fé. This mine has for many years almost exclusively supplied the world with this precious stone. It generally occurs in a gangue of pure white quartz, which enhances the extreme delicacy of the green colour; but there are examples of their being found in a fine grained schistus like touchstone. These stones are called emeralds of Peru, though it is doubtful if emeralds were ever found in that viceroyalty; and those of New G. were celebrated in 1740. Coal is a rare production in the Cordilleras. There are, however, beds of coal in the valley of Bogotá, near Tausa Canoas, and in the Cerro-de-Suba, places elevated 2,500 metres, or 8,201 ft. above the level of the sea. Copper-mines of a superior quality are wrought in the vicinity of Nirgua, which besides supplying the planters with materials for their boilers, cylinders of mills, and other implements, furnished in 1804, 171 quintals for exportation. Salt is found in great abundance along the whole coast, and is of a beautiful whiteness.

Manufactures. The manufactures of the country are of the simplest kinds, consisting chiefly of leather, hammocks, baizes, hats, and salt. None of them are of importance. The principal salt-works are at Araya and Santa-Marta. The facilities for internal communication have been very much neglected; but steamboats have been established on the Magdalena and other rivers, which will much facilitate the development of the country bordering on that great river and open rich stores to commerce. The system of roads is altogether unavailable and bad; there is scarcely a passable road throughout the whole country. The backs of mules form the principal means of conveyance; and in places along the Andes, where even these cannot find a sure footing, men are employed to transport travellers in a rude kind of chair fastened to the back. Bridges are almost unknown. The method of crossing streams is by ropes stretched from one side to the other, with sling and basket, in which the passenger is seated, and pulled safely over the rivers or abyss, as the case may be. A considerable inland trade is carried on by the merchants of the coast. Foreign imports are sent by the steamboats on the Magdalena, or carried on the backs of

mules into the interior, and the metals, hides, and other produce are brought down and re-shipped to foreign countries in exchange.

Commerce.] The average annual value of the commerce of New G. is estimated at 40,000,000 francs. The imports in 1840 scarcely exceeded 17,000,000 fr.; in 1843 they rose to 23,000,000 fr.; and in 1844 again fell off to 22,000,000 fr. In 1843, the exports amounted to 16,000,000 fr., and in 1844 to 14,000,000 fr. The contraband trade is very large. Commercial transactions carried on with the following nations approximate to the proportions annexed:

Jamaica and England,	about 13,000,000 fr.
France,	3,769,000
United States,	1,000,000
Island of Curaçoa,	820,000
Spain,	610,000
Venezuela and Peru,	each 750,000 = 1,500,000

The ports of Santa-Marta, Cartagena, Chagres, Panama, and Porto-Bello, are most frequented by foreign vessels. The port of Cartagena, on the N coast, is one of the finest harbours of the world. The coasting-trade is chiefly conducted from the port of Panama. A line of steam-ships, owned by the British, carry the mails from Chagres to Valparaiso; and the W. India steamers, plying between England and the United States, leave the mails at the isthmus, to be carried across to that point, and receive the return mail. The customs' duties levied on the £880,000 of merchandise entered in 1844, amounted to £230,800. The values imported in 1844 were thus divided for principal heads:

Jamaica and Liverpool, for	£520,000
France,	150,800
The United States,	40,000

The remainder of the imports was derived in nearly equal proportions from the Isle of Curaçoa, Spain, Venezuela, and Peru. The imports from England and Jamaica were therefore about 3-5ths of the whole. About one-fourth of the whole foreign commerce of the country centres in the port of Cartagena; of the exports alone, more than one-third. Of a total of 12,950 tons of shipping, entries and sailings together, exclusive of coasting-craft, in 1844, the British flag in that port covered 5,404 tonnage. The exports of British and Irish produce to New G. in 1846 amounted in value to £219,593; in 1847 to £145,606; in 1848 to £247,916; in 1849 to £331,112; and in 1850 to £330,810. The chief imports into this country in 1850 from New G. consisted of 198 cwt. of Peruvian bark; 2,886 cwt. of cochineal; 4,692,016 lbs. of coffee; 3,395 cwt. of codillas and hemp; 12,201 lbs. of sarsaparilla; and 97,035 lbs. of cotton. At Riohacha a project has been started for a railway to run from that city to the valley of Dupar in the province of Santa Marta. It appears that the government are making exertions to facilitate land-intercourse, and introduce the steam-boat upon the Magdalena, and generally into the waters of the republic; but their efforts have as yet met with little success. A few years ago a company was chartered in New G. for purposes of general improvement, with a capital of 200,000 d., and with a special design to navigate the Magdalena river, plying between Santa Marta on the Caribbean sea, and Honda the head of the river-navigation, a distance of about 600 m. The river being very shallow at certain seasons, having at some points only about 3 ft. water in the channel, the boats were constructed with flat bottoms, and so as to draw, with their engines, the necessary fuel, and 60 tons of freight, only 2 ft. 9 in. They were 150 ft. on deck, 6 ft. hold, 25 ft. beam, and 40 ft. over all. Each vessel has two high-pressure engines of 50 horse-power, and their estimated speed is 12 m. an hour. The Magdalena, although one of the finest rivers in the world, and accessible

for more than 500 m. from its mouth, has till now been of comparatively little benefit, owing to the strength of its descending current.—An important treaty was concluded between the United States and the republic of New G. on the 12th of December 1846, and ratifications thereof exchanged on the 10th of June 1848. The conquest or reduction of Mexico was decided upon about the date of this arrangement with New G. By the first subsidiary declaration, under the 35th article of this Bogota treaty, the territory of the isthmus, from the S extremity to the frontier of Costa-Rica, and the transit from one sea to the other, are thrown open to the enterprise of the United States. New G. guarantees to the States a perfect equality with its own citizens in the enjoyment of every right of transit across the isthmus, by all existing and by all future routes or modes of communication; and in return for these and for other very complete privileges and advantages of a commercial character, the United States have guaranteed to New G. the perfect neutrality of the isthmus itself, in order that the free transit from sea to sea should not be interrupted, while this 20 years' treaty lasts, and also the right of sovereignty and property over the territory.—A more recent scheme for uniting the two oceans lies also within the frontiers of this republic, that namely for a navigable canal between the Savannah river and Caledonia bay. See article MIGUEL (GULF OF SAN).—The opening of roads, the improvement of the dists. where tobacco is cultivated, and the extension of trade with the coast, are still attracting the notice of the executive; and the various decrees issued on these matters evince a spirit of concession to those whose immediate interests are concerned.

Government.] The form of government of New G. is based upon the plan of that of the United States. The legislative function is vested in a senate and house-of-representatives, both consisting of members elected by the cantonal deputies of the provinces, in a provincial assembly held once in four years. The executive is vested in a president and vice-president, the former of whom is elected for a period of four years. The constitution is, with slight variations, the same as was adopted by the confederation at Cucuta on the 18th July 1821. The departments have each an intendente, with full powers under the general government; saving military command. The provinces are under the administration of governors, with similar powers and restrictions, and the cantons and parishes have each their own officers.—The laws, as in all the old Spanish colonies, are an ill-digested mass of the laws of Spain and the Indies; but even such as they are, they would be tolerable if they were not so badly administered. Trial by jury, however, is allowed to all.—The Roman Catholic is the religion of the nation, and the church-festivals and celebrations are conducted with extraordinary magnificence. The clergy are paid by the state; but since the revolution they have lost much of that influence they formerly possessed over the minds of the people.—Education is more flourishing in New G. than in the other Colombian states, and as a consequence the people are more intelligent and refined. The government is making great efforts to instruct the pop. Lancasterian schools are now established in all the chief cities and towns; and elementary schools are by law supported in every district of the country.

Revenue.] The public revenue is raised from import and export duties, taxes, salt-mines, the post-office, profit on tobacco, and the sale of public lands. According to an official statement issued in relation to the estimates for 1850-51, the finances of New G. do not appear to be flourishing; a deficit is shown of nearly 5,000,000 reals; the resources of the government being put down at 21,894,000 r., and the outlay at 26,329,000 r. It would seem that the chief expenditure rests upon the following items: National debt, 4,397,398 r.; war-department, 3,043,265 r.; treasury and finance, 6,651,330 r.; and government department,

2,130,804 r. The whole of the debt of the republic, including internal and external, was represented at 208,619,397 r., and is chiefly due in England. It is not mentioned what are the kind of expedients that will be resorted to in order to cover the deficiency, or whether the government had in contemplation any plan for effecting necessary retrenchment. Nor is the condition of financial matters more hopefully set forth in the message of General Lopez to the New G. congress on 1st March 1853. According to that document, the public debt now amounts to the enormous sum of 377,000,000 reales, or 47,125,000 dollars, whilst 28,000,000 r. are required for the expenses of the incoming year, and 10,000,000 r. to complete that of the current year, which with 8,000,000 r. to pay the negotiated debts and the expenses of the army makes a total deficit of 18,000,000 r. or 2,250,000 d., whilst the credit for the incoming year only amounts to 20,000,000 r. or 2,500,000 d. The president goes on to say that the only possible way he can propose for remedying this great evil is to give 2,000,000 fanegadas of the state lands (*tierras baldías*) to the creditors, which he conceives can be done without any loss to the country, as, from the survey under Colonel Cadizal, now in progress, it is proved that in the 11 provs. already surveyed (out of the 35 that constitute the republic) there are 8,474,576 fanegadas of unclaimed lands; and by converting the scrip now held for the foreign debt into notes representing the waste lands, the holders would either be obliged to colonise or cultivate the lands by native labour, to prevent a total loss to themselves. Thus he adds, "whatever would be the course taken relative to the cultivation of the lands, it would produce an augmentation of the nation's riches, if it did not produce a large emigration, and with it incalculable advantages." The agent of the creditors in Bogota is said by the president to be favourable to this plan.

Population.—An official statement in 1836 estimated the pop. of New G. at 1,687,000, or about 4.4 to the sq. m.; and divided it according to races thus. —Whites and Creoles, 1,053,000; Indians, 376,000; Free-coloured, 168,000; Slaves, 85,000. The estimated pop. in 1850 was officially reckoned at 2,138,000. —The Whites, Negroes, and mixed races, are similar in origin and manners to the same classes throughout Spanish America. Many of the Indian tribes still enjoy their independence, and almost all of them retain their language and particular customs. The Guairas or Guagniros, occupy part of the provs. of Rio-de-la-Hacha and Santa-Marta, and live on friendly terms with the Motilones, who inhabit the lands watered by the Muchuchies and the St. Faustín as far as the valley of Cucuta. They infest the passes of the mountains; pillage, conflagration, and murder mark their incursions into the plains. The Chilimes, and another band of the Guairas, are freebooters on the banks of the Magdalena. The Urubas, the Zitaras, and the Oromisas, form three independent states in the prov. of Darien; the first under a native prince called the Plaxon, the two last under a republican government. The Curacunas dwell on the mountains of Choco and Novita; they extend their ravages as far as Panama, and even attack small vessels in search of plunder. The ancient inhabitants of Quito are said to have spoken many different dialects. The missionaries have specified not less than 117; it appears, however, that the language of the Quitos prevailed over the plateau, and that of the Scires along the coast. In the year 1600, the Cofanes, one of the 117 tribes of Quito, are said to have amounted to 15,000 souls; they spoke a peculiar language, which was also spoken by the inhabitants of Anga-Marca, and in which a Jesuit has written an epitome of Christianity. Of the 52 tribes of Popayan, those of Guasinca, Cocanuca, and Paos, had three distinct languages, which are still partly preserved in the writings of the missionaries. The Xibaros, the Macas, and the Quixos, at one time formidable tribes, occupied the eastern declivities of the Andes, in the kingdom of Quito. Nearer the level of the sea, in the vast district of Maynas, are found the remains of unnumbered tribes, whose languages the missionaries have classified in the following order:—1st, Sixteen mother tongues, of which the Andoa has 9 dialects, the Campa 7, and the Mayna 4; 2dly, Sixteen scattered dialects that have no resemblance to any known mother tongue; 3dly, Twenty-two tribes, several of which are still extant,

although their language is extinct; lastly, ten unknown languages. We have not included in this list the extensive tribe of the Omaguas, spread over the whole course of the Marañon or Amazon, and speaking a dialect of the Guarani language of Buenos Ayres, but simpler in its grammatical forms, and more abundant in its vocabulary, from which we may infer that they had arrived at a greater degree of civilization than their kindred tribes. The migrations of this tribe of river-navigators have not been clearly ascertained, but it is generally believed that they were originally from Brazil. The language of Bogota has been almost extinct since the end of the last century. It was extended by the victories of the Zaque Huncabua, by the warlike exploits of the Zippas, and by the influence of the lamas of Icaza, from the plains of the Ariari and the Rio-Meta to the N of the Sogamozo. This language was called by the natives the Chibcha.

Cities and towns.—The republic is divided into the 5 departments of Ystmo, Cundinamarca, Cauca, Magdalena, and Boyaca.—The city of Bogota is the capital of the republic. It is situated at the foot of two mountains which shelter it from the violent E winds, on a table-land 8,650 ft. above the level of the sea, in N lat. 4° 37', and W long. 74° 10'. It was founded in 1538 by Quesada, and now contains 40,000 inhabitants. See BOGOTA.—Hondo, on the Magdalena, the port of Bogota, is situated about 55 m. SW of that city. It has a considerable trade in cotton goods, hides, and grain, and contains a pop. of about 10,000.—Popayan, the next city to Bogota in size, is more elegantly built, being the residence of many opulent merchants. It is situated on the river Cauca, and has a considerable trade through the port of Cartagena. Pop. 25,000.—Cartagena is the principal port of the republic, and carries on quite an extensive trade with the United States and Europe. It is built on a sandy island of the N coast, to the W of the Rio-Magdalena, and possesses one of the finest harbours in America. It is well-fortified, and has a pop. of 18,000. Though much decayed, it is still a fine city, and the centre of trade. Panama is built on a peninsula of the S coast of the isthmus, to which it gives its name. It was formerly much frequented by Spanish merchantmen; and its importance, has lately been revived by the project for making it the western depot of interoceanic communication. See articles CHAGRES and PANAMA. Its pop. fluctuates, but it is generally about 10,000.—Porto-Bello, or Puerto-Bello, is a small town or village, on a fine natural harbour, but in so unhealthy a situation that it has acquired the title of the 'grave of Europeans.' It stands on the N side of the isthmus, opposite Panama.—Santa-Marta, a fortified town, on the coast to the E of Magdalena, possesses a considerable trade, both internal and external. Pop. 6,000. Rio-Hacha, farther E, is a small town, with only 1,000 inhabitants; but is noted for the pearl-fisheries in its vicinity. There are few other towns of consequence, except the capitals of the several provinces, and a few inconsiderable ports on the Pacific.

History.—The coasts of New G., which border on the Caribbean sea, were first visited by Columbus during his fourth voyage. Sailing from Spain to the W. Indies, he arrived with his fleet at St. Domingo, where, having been refused permission to land, he was obliged to stand to the W; and after sailing in this direction for a few days, discovered a small island off the Cape of Honduras, where his brother landed and traded with the natives. Prosecuting their voyage, they touched at the cape itself, on which they landed to take possession for the crown of Spain. After performing this ceremony, the fleet proceeded along the shore, and was compelled by the easterly winds to double a cape, to which the pilots gave the name of Cape Gracias-a-Dios. Columbus touched in the course of the voyage at Veragua, Nombre-de-Dios, Belos, Porto-Bello, and other places. At Veragua he sent his brother up into the country to search for gold, and Barbiol-

new returning with a considerable quantity, the admiral wished to have planted a colony here, but after several fruitless attempts, abandoned the design. Ojeda and Amerigo Vespucci, and many other adventurous persons, followed Columbus in exploring parts of the coast of New G.; and Vespucci gave the first regular description of the people who inhabited its shores. In 1508, Ojeda and Nicuesa obtained from the Spanish crown extensive grants in this district and the adjoining country. Ojeda had the country from Cape-de-la-Vela to the gulf of Darien included in his charter, which tract was to be styled New Andalusia; and Nicuesa was appointed to govern from the gulf of Darien to Cape Gracias-a-Dios; the territory included within these points to be named Golden Castle. Soon after the arrival of Ojeda at Cartagena, he imprudently attacked the natives, and lost the greater part of his men, but was fortunately relieved by the arrival of Nicuesa; he then went to the gulf of Darien, and established a colony on the *San Pedro* promontory, which he named St. Sebastian. The new colony was reduced to such distress in a short time, that it was determined to proceed to Cartagena; but while on their passage, they met with two vessels bringing supplies; and returning to St. Sebastian, found their town destroyed by the natives. The whole colony then sailed to the river of Darien, where they attacked and conquered an Indian tribe, and founded a town, which they named Santa-Maria-del-Darien. In the meantime Nicuesa endeavoured to establish a colony at Nombre-de-Dios; but a deputation being sent to request him to assume the government, Ojeda having died, he repaired thither. On his arrival he found that great dissensions had arisen among the colonists, who, instead of appointing him to the government, put him in a decayed vessel, and sent him to sea, where he is supposed to have perished. The prov. of Terra-Firma, including both the grants of Nicuesa and Ojeda, was given by a subsequent charter, in 1514, to Pedro Arias-de-Avila, under whose government Vasco Nunez-de-Balboa, the discoverer of the South sea, was beheaded on account of a revolt. Under the orders of Avila, the W coast of Panama, Veragua, and Darien was explored as far N as Cape Blanco, and the town of Panama was founded. In 1536, Sebastian-de-Benalcázar, one of the officers who accompanied Pizarro in the expedition to Peru, effected the conquest and colonization of the southern internal provs. of New G.; whilst Gonzalo Ximenes-de-Quesada, who had been sent by Lago, the admiral of the Canaries, overran the N districts from Santa-Marta. They met with considerable opposition from the natives; but finally succeeded in reducing the country, and the whole was formed into a kingdom, and governed by a captain-general, appointed in 1547; to check whose power the royal audience was established, of which he was, however, made president. In 1718 New G. was formed into a viceroyalty. This form of government continued until 1724, when the captain-generalship was restored; but in 1740 the viceroyalty was re-established. Under this system—the evils of which were of a very grievous nature—the inhabitants of New G. continued until the invasion of Spain by the French. The desire of independence had long been prevalent, but it was not until 1806 that it began to be publicly avowed. The juntas then chosen were composed of persons generally favourable to independence. A congress from the different provs. or departments of the viceroyalty soon afterwards assembled, and in 1811 a formal declaration of independence was made. See article COLOMBIA. The cause of freedom and that of the royalists were alternately triumphant, and many frightful scenes of rapine and bloodshed occurred. In 1816 a decisive action was fought between the independents and a Spanish army under Morillo, which ended in the total defeat of the former, and the dispersion of the congress. After remaining under the dominion of the royalists for three years, New G. was again emancipated by the army of Bolívar, who entered Santa-Fé in August, 1819. His successes after this period were uniform, rapid, and brilliant; and the Spaniards finally evacuated the country in 1822, having been confined to the isthmus of Panama from the period of Bolívar's entrance. The republic of Colombia, of which New G. was a member, was formed in 1831, but on the dissolution of that confederation in 1831, it became once more a separate state, and as such remains to the present time. Santander was elected first president, and took office on the 7th October 1832.

NEW GULFORD, a village of Perry township, Coshocton co., in the state of Ohio, U. S., 67 m. NE of Columbus.

NEW GUINEA, next to New Holland, the largest island of Australasia, lying between the parallels of $0^{\circ} 15'$ and 10° S, and the meridians of $131^{\circ} 20'$ and $149^{\circ} 20'$ E. Its approximative area is 275,000 sq. m. It is separated from New Holland on the S by Endeavour and Torres' straits; from New Britain on the E by Dampier's straits; and from Gilolo by Pitt's straits. It was discovered by the Spaniards in 1528 and 1543, but is still almost unknown. Forrest merely anchored on the N coast; Cook landed on the S shore; Dampier, Cartaret, Bougainville, D'Entrecasteaux, only visited some of the neighbouring islands; Le Maire and Schouten, who sailed along

the greatest part of the N coast, had several interviews with the natives of the surrounding islands, but did not land upon the main island; and even the recent voyages of the Fly and the Rattlesnake effected little towards increasing our acquaintance with this large island. No civilized colony has yet been planted upon it; and the interior is altogether *terra incognita*. It is of irregular outline. The coasts in some parts appear to be high and mountainous, and in many places are deeply indented with bays. Of about 140 m. of the S coast examined by the expedition under Capt. Blackwood, in the Fly, from S lat. $8^{\circ} 45'$, and E long. $143^{\circ} 35'$, to S lat. $7^{\circ} 40'$, and E long. $144^{\circ} 40'$, "and for an unknown distance beyond that point, the coast has everywhere the same features. It was low, flat, muddy, covered with jungle and impenetrable forests, and intersected in every direction by a multitude of fresh-water arms and channels, uniting one with another, and forming a complete net-work of fresh-water canals of all sizes and depths, from a mere muddy ditch to a width of 5 m., and a depth of 20 to 30 ft. This coast was fronted by immense mud-banks, stretching from 10 to 20 m. outside, having at low water a general depth of about 12 ft., and some sand-banks much shallower or quite dry. These mud-flats gradually deepened towards their outer edge to 3 and 4 fath., and then more rapidly to 6, 10, 15, and 20 fath. Now, this is precisely the formation of the delta of a river, and the only difficulty in the present case is, is the supposed river large enough to produce such a delta on an island such as New G.? From what we know of the rest of the island, however, the existence of such a river becomes highly probable. A range of high mountainous land runs along all the N coast from Dampier's strait to Geelvink bay. High land also comes out upon the SW coast about Triton bay, where the Dutch once formed a settlement near the 137th meridian. The hollow between these ranges would run towards the SE, in which direction, of course, their drainage would be deflected. We have already seen reason to believe that the country is a wet one; and the moisture, which does not fall as rain from the SE trade-wind, as it passes over flat land, is no doubt caught and precipitated in abundance on the SE sides of the mountains, and is thus sent down on the flat in the shape of rivers. Whether these ever join into one stream, or whether a number of them all run for the SE coast, and thus unite only in forming the delta of which we traversed the outer belt, is of course left open to conjecture. If they ever unite in one stream, it will probably be found to be a very noble one for the size of the island, winding perhaps through rich flats of tropical forests. Whatever be the characters of the interior waters, however," continues Mr. Jukes, "they must afford access for small craft into the very heart of the country. Unlike the rivers of Australia, the estuaries of which are all salt, and the rivers mostly trickling shallow streams, running over rocks or sands, the rivers of New Guinea are so full, and abound so with fresh water, as to influence the sea for miles outside their mouths, and expel the salt water even from the flattest and most sluggish of their course. Any craft, then, that can get across the mud-bank on their mouths, need never fear the being able to find water for many miles above them. I know of no part of the world, the exploration of which is so flattering to the imagination, so likely to be fruitful in interesting results, whether to the naturalist, the ethnologist, or the geographer, and altogether so well calculated to gratify the enlightened curiosity of an adventurous explorer, as the interior of New G. The very mention of being taken into the interior of New G. sounds like being allowed to visit some of the en-

chanted regions of the Arabian Nights, so dim an atmosphere of obscurity rests at present on the wonders it probably conceals!" Some lofty mountains appear to rise above each other in successive ranges towards the central part of the island. One of these ranges, stretching in a SSE direction from the meridian of 147° to $150^{\circ} 30' E$, presents at its NW extremity a summit of the estimated alt. of 10,046 ft., to which the name of Mount Yule has been given; and another, about 60 m. to the S of Mount Yule, which has an estimated alt. of 13,705 ft.—Swine, dogs, birds-of-paradise, parrots, sea-fowl, fish, tre-pang, ginger, cloves, nutmegs, cocon, betel, sago, and bread-fruit, are enumerated among the productions of the island.

Population. The inhabitants are a variety of the Papuan or Malaysian Negro race. They have projecting lips, a flat broad nose, a large mouth, large eyes, shining black hair, and a black rough skin. They are strongly built, and go nearly naked, having only a thin stuff made of the fibres of the cocoa-nut round their loins. Their habitations on the coast are built on piles, with a sort of bridge extending above high-water mark. A dwelling of this kind is generally occupied by several families. One of these large habitations is thus described by the author of the *Voyage of the Fly*: "The house, or whatever it might be called, was raised from the muddy ground about 6 ft., resting on a number of posts placed irregularly underneath it, most of which seemed to be stumps of trees cut off at that height and left standing. The floor raised upon these seemed to consist of poles fastened across a framework, on which were laid loose planks made apparently of the outer rind of the sago-palm, split open and flattened and dried. This floor was perfectly level and smooth, and felt firm and stable to the foot. It was about 30 ft. in width, and upwards of 300 ft. long. The roof was formed of an arched framework of bamboo, covered with an excellent thatch of the leaves of the sago-palm. It was 16 or 18 ft. high in the centre, from which it sloped down on either hand to the floor. The end walls were upright, made of bamboo poles, close together; and at each end were three doorways, having the form of a Gothic arch, the centre being the largest. The inside of the house looked just like a great tunnel. Down each side was a row of cabins; each of these was of a square form, projecting about 10 ft., having walls of bamboo reaching from the floor to the roof, and accessible at the side by a small door very neatly made of split bamboo. Inside these cabins we found low frames, covered with mats, apparently bed-places; and over head were shelves and pegs on which were bows and arrows, baskets, stone axes, drums, and other matters. In each cabin was a fire-place (a patch of clay), over which was a small frame of sticks, about 2 ft. high, 3 ft. long, and a foot wide, as if for hanging something to cook or dry over the fire. A stock of dry firewood was also observed in each cabin on a shelf overhead. One or two of these fire-places were also scattered about in different part of the sides of the house. Between each two cabins was a small doorway, about 3 ft. high, closed by a neatly made door or shutter of split bamboo, from which a little ladder gave access to the ground outside the house. At each end of the house was the stage or balcony mentioned before, being merely the open ends of the floor outside the end walls, on which the cross poles were bare or not covered with planks. The roof, however, projected over these stages, both at the sides, and much more overhead, protruding forward at the gable, something like the poke of a lady's bonnet but more pointed. Inside, all the centre of the house, for about a third of its width, was kept quite clear, forming a noble

covered promenade. The only light proceeded from the doors at the end, and the little side-doors between the cabins. Near the centre, on one side, was a pole reaching from the floor to the roof, on which was a kind of framework covered with skulls, very curiously ornamented, with a wooden projection inserted for the nose, black protruding lumps of gum, like short horns, in the sockets of the eyes, at the end of which were broad red seeds. The mouth and lower jaw was smeared over with black gum, in which were stuck seeds both red and white. On the base of the skull was fastened a handle of twisted cane, by which it was suspended upon the frame, but what was the form or nature of this frame they saw too little light, and much too little time to determine. We nowhere saw any sign or fragment of European articles of workmanship, nor iron of any sort or kind. There was little or no cultivation near the houses. Ripe cocoa-nuts were hanging on some rails, apparently to dry; and in one spot the earth had been dug and heaped up into a circular mound, with a trench round it, and on this some young plants had been set. There were only one or two plantain or banana trees, but a dense thicket of sago-palms grew all round in the forest." The Chinese, who trade with the NW parts of the island, appear to have introduced some of the rites of Fo among the natives in that quarter. The principal part of the trade is monopolized by the inhabitants of the neighbouring island of Ceram.

Climate. "Everything we saw ashore," says Captain Jukes, "the large sheltered houses raised above the ground,—the dry firewood stored in them,—the sticks and bushes on the pathways, &c.,—denotes the climate to be a very wet one, and in all our excursions into New G. we found almost continual rain. It is probable that during the whole SE monsoon, or from the middle of March to the end of October, the weather is rainy, and that during the NW monsoon, which brings rain to the N coast of Australia, the S coast of New G. may have its dry season. Australia, on the contrary, has a remarkably dry climate; and though there are frequent showers during the SE monsoon on the margin of the NE coast and about Cape York, where the trade-wind first strikes upon the land, it is probable that in the interior no rain falls during the greater part of the year, and heavy showers only during the remainder. Not only, however, is this variation of climate not sufficient to account for the utter difference in the vegetation of the two countries, Australia and New G.; but I much question whether the difference in the climate be not in great part the result of that in the vegetation. The thick dank woods and jungles of New G. completely protect the soil from the sun, the broad close leaves shelter even the stems of the trees, and all tend to produce a coolness favourable to the precipitation of moisture from the damp trade-wind. The open and scattered woodlands of Australia, on the contrary, offer no shelter to the ground from the rays of the sun. The small, thinly-disseminated leaves of these evergreen trees, instead of giving shade, become themselves as hot and parched as the rocks and sands beneath them. The ragged strips of dry and resinous bark hanging from the trunks of all the trees, are like tinder, ever ready to catch fire with a spark, and the grass among the trees commonly resembles hay. Everything absorbs the heat freely, and radiates it into the surrounding atmosphere. Instead of being cooled then, and precipitating its superabundant moisture, the sea air on entering an Australian wood has its temperature raised, and becomes capable of licking up any drop of humidity it may find still lingering there. For this reason, a current of air is seldom perceptible in an Australian forest, which always feels hot, dry, and oppressive."

NEW HACKENSACK, a village of Fishkill township, Dutchess co., in the state of New York, U. S., 79 m. S of Albany.

NEW HAGERSTOWN, a village of Orange township, Carroll co., in the state of Ohio, U. S., 114 m. ENE of Columbus. Pop. in 1840, 250.

NEW HAMBURG, a village of Poughkeepsie township, Dutchess co., in the state of New York, U. S., on Hudson's river, near the confluence of Wappinger's creek.

NEW HAMPTON, a township of Belknap co., in state of New Hampshire, U. S., 29 m. NW of Concord, bounded on the W by Pemigewasset river. It is hilly, but very fertile. Pop. in 1840, 1,809.—Also a village of Lebanon township, Hunterdon co., in the state of New Jersey, 47 m. N of Trenton, on

the S side of Musconetcong creek. It contained in 1840, about 25 dwellings.

NEW HANOVER. See **HANOVER (New).**

NEW HANOVER, a county in the SE part of the state of North Carolina, U. S., and bounded on the E by the Atlantic. It comprises an area of 995 sq. m., and is drained by the NE branch of Cape Fear river and its tributaries. In its E part is a large swamp, and along the shore are numerous long, low, and narrow islands. Pop. in 1840, 13,312; in 1850, 17,764. Its cap. is Wilmington.—Also a township of Montgomery co., in the state of Pennsylvania, 74 m. E of Harrisburg. It has a hilly surface, and is drained by Swamp creek. The soil consists of loam and red shale. Pop. in 1840, 1,419.

NEW HARMONY. See **HARMONY (New).**

NEW HARTFORD. See **HARTFORD (New).**

NEW HARTFORD CENTRE, a village of New Hartford township, Litchfield co., in the state of Connecticut, U. S., 18 m. W by N of Hartford.

NEWHAVEN, or MEECHING, a parish and seaport in Sussex, 36 m. E by S of Chichester, and 55 m. S by E of London, at the mouth of the Ouse, which is here crossed by a handsome drawbridge, and on a branch line of the Lewes and Brighton railway. Area of p. 1,217 acres. Pop. in 1801, 584; in 1831, 904; in 1851, 1,358. It possesses a harbour of considerable value, formed in the channel of the river Ouse, at its entrance into the sea, by wooden piers carried out in a S direction across the beach. The Ouse is navigable as far as the town of Lewes, and open to the flow and ebb of the tide for 4 m. further up the stream, or 12 m. altogether, and affords a powerful backwater for scouring the entrance. The average rise of spring-tides at the harbour's mouth is from 19 to 20 ft., and of neap-tides about 14 to 15 ft. The bar is left dry at low-water spring-tides, but within the piers there is about 2 ft. water at such times, and this depth continues uniform for 1 m. up the channel. The distance between the pier-heads is only 106 ft. The bay is defended by a small fort. There is a custom-house, with a collector, comptroller, and harbour-master. The town is small but neat. A considerable trade is carried on in the importation of coal and foreign timber. Bonding warehouses for all kinds of timber have been constructed on the quay on an improved principle; the coasting trade in butter, flour, and corn, is also large.

NEWHAVEN, a fishing-village on the frith of Forth, 1 m. W of N. Leith. A substantial low-water stone-pier here encloses a commodious harbour for wherries and fishing-boats. About 500 yds. W of the stone-pier, a chain-pier was constructed in 1821, at an expense of £4,000. It is upwards of 500 ft. long, and 4 ft. wide, and extends to a depth at low-water of from 5 to 6 ft. About 1 m. to the W is the new pier of Granton. The v. is included within the parliamentary and municipal boundary of Leith. The inhabitants, an industrious, hardy, and thriving race, have for centuries formed a peculiar and exclusive community, all more or less mutually related by marriage, and rarely intermarrying with others than natives of the village. The males are mostly all fishermen, weather-beaten and athletic, and so trained from youth to spend most of their waking hours on the sea, that they are expert in nothing but handling the sailing-tackle and the net. Their wives and daughters are a sturdy corps of Amazons, so distinguished by peculiar habits as to be quite a study to the observer of human nature. They partake all the broad features which mark the character of their sisterhood of Fishermans, and share with them the trade of supplying the markets of Edinburgh and Leith with fresh fish. They dress in a manner at once coarse, costly, and peculiar,—sufficiently tidy when

viewed in connexion with their occupation, and not a little interesting to the lover of the picturesque. They usually wear a jerkin of blue cloth, and, on their neck and bosom, several fine neckerchiefs; and they wrap themselves up in a profusion of petticoats of different stuffs and colours, two or three being regularly adjusted on the person, and others so contorted into twists and bundles below the waist as to produce a strange bulkiness and grotesqueness of appearance.

NEW HAVEN, a county in the S part of the state of Connecticut, U. S., comprising an area of 540 sq. m., bounded on the S by Long Island sound, by Housatonic river on the SW, and drained by Nan-gatuck, Quinnipiac, Pomperaug, West, Mill, and Mununkatuck rivers. It is partly mountainous, and possesses considerable diversity of soil. Pop. in 1840, 48,619; in 1850, 65,841.—Also a township of Addison co., in the state of Vermont, 60 m. W of Montpelier. It has a hilly surface, and is watered by Otter creek, Middlebury river, and Little Otter creek. The soil consists chiefly of marl, clay, and loam, and is very fertile. Pop. in 1840, 1,583.

NEWHAVEN, the cap. of New Haven co., in the state of Connecticut, U. S., at the head of a bay of Long Island sound, 36 m. S by W of Hartford, 76 m. NE of New York, and 300 m. from Washington, in N lat. 41° 18', W long. 72° 56'. Pop. in 1810, 5,772; in 1820, 7,147; in 1830, 10,180; in 1840, 12,960; in 1850, 22,539. It is beautifully situated in a plain sloping towards the sea, and enclosed amphitheatrically by hills, of which two, named East and West Rock, rise perpendicularly to the height of from 330 to 370 ft. The city extends about 3 m. from E to W, and 2 m. from N to S, and is laid out with great regularity. It consists of two parts, an old and a new town. The former is built in the form of a square, and subdivided into nine parts, of which the central was reserved for public buildings, and contains several handsome edifices. The houses are chiefly built of wood, neatly painted, and surrounded by court-yards and gardens. The new town is well and substantially built. The harbour is safe but shallow, and gradually filling up with mud. It has about 7 ft. water on the bar at low tide; common tides rise 6 ft., and spring-tides about 7 or 8 ft. Long wharf is 3,943 ft. in length; but there is less depth of water at its termination now than there was in 1765, when it was only 20 rods long. There is another wharf which has a basin, in which, by means of flood-gates, the water is always kept at the elevation of high tide. The maritime commerce of New H. is more extensive than that of any other city in Connecticut, its foreign and coasting trade being both considerable. The sealing business, connected with the China trade, formerly brought considerable wealth into the city. At present its foreign trade is chiefly with the W. Indies. The tonnage of the port in 1840 was 11,500. A line of steam-boats connects this port with New York, and also several lines of packets. The Farmington canal connects New H. with Northampton, Massachusetts, and Connecticut river near it; and a railroad connects it with Hartford. The most important public institution in the city is Yale college, one of the oldest and most extensive institutions of the kind in the United States. Without large funds it has accomplished great things. It was founded in 1701, originally at Killingworth; was removed to Saybrook in 1707; and to New H. in 1717. There are 4 college halls 100 ft. by 40, 4 stories high, containing 32 rooms each for students; and another hall is devoted to the use of the theological students. The chapel and college library occupy different floors of one building; and two other buildings, called the Athenæum and the Lyceum, are appropriated to re-

citation and lecture-rooms, rooms for the professors, and for the libraries of the literary societies. In the rear is another range of buildings, consisting of the chemical laboratory, the commons hall, in the second story of which is a spacious apartment devoted to the most splendid mineralogical cabinet in the United States, and a stone building containing a collection of paintings. A short distance from these are the buildings devoted to the law and medical departments, the latter of which has an anatomical museum and a library. Yale college has more students, and has educated more men, than any other college in the country. In 1841 the officers were 30 in number. Of these, besides the president, 17 were professors, and the remainder tutors or subordinate officers; 15 are connected with the college proper. The whole number of students of all descriptions was 550. Of these 410 were undergraduates, 59 theological students, 31 law, 47 medical, and 3 resident graduates. The whole number of graduates is over 5,000, of whom nearly 1,400 were ministers. The number of volumes in the various libraries is 33,000.—Also a township of Oswego co., in the state of New York, 10 m. E of Oswego, and 161 m. WNW of Albany. It has an undulating surface, and is drained by Catfish creek, an affluent of Lake Ontario, by which it is bounded on the N. The soil consists of sandy loam, and is very productive. Pop. in 1840, 1,738.—Also a township of Huron co., in the state of Ohio, 82 m. N of Columbus. Pop. 1,270.—Also a village of Gallatin co., in the state of Illinois, 197 m. SSE of Springfield, on Little Wabash river, 2 m. from its mouth. Pop. about 120.

NEW HAVEN MILLS, a village of New Haven township, Addison co., in the state of Vermont, U.S., 54 m. WSW of Montpelier.

NEW HILLS, a parish in the SE of Aberdeenshire, on the NE by the Don. Area 17,000 acres. Pop. in 1801, 1,305; in 1851, 3,525.

NEW HOLLAND. See AUSTRALIA.

NEW HOLLAND, a village of Earl township, Lancaster co., in the state of Pennsylvania, U. S., 49 m. E by S of Harrisburg, containing in 1840 about 30 dwellings.—Also a v. of Perry township, Pickaway co., in the state of Ohio, 43 m. S of Columbus.

NEW HOLM, a township in Whitby p., Yorkshire, 2½ m. W of Whitby, on the coast. Area 2,250 acres. Pop. in 1831, 347; in 1841, 383.

NEW HOPE, a town of Solebury township, Bucks co., in the state of Pennsylvania, U. S., 110 m. E by N of Harrisburg, on Delaware river, which is here crossed by a fine bridge, opposite Lamberts-ville, New Jersey. Pop. in 1840, 820.—Also a village of Augusta co., in the state of Virginia, 130 m. WNW of Richmond. Pop. about 50.—Also a v. of Iredell co., in the state of N. Carolina, 163 m. W of Raleigh. Pop. about 30.—Also a v. of Scott township, Brown co., in the state of Ohio, 99 m. SW of Columbus, on the E bank of White Oak creek. Pop. about 80.

NEW HUDSON, a township of Alleghany co., in the state of New York, U. S., 14 m. W of Angelica, and 270 m. WSW of Albany. The surface is undulating, and is drained by Black creek. The soil affords good herbage. Pop. in 1840, 1,502.

NEW HURLY, a village of Shawangunk township, Ulster co., in the state of New York, U. S., 83 m. SW of Albany. In 1840 it contained about 20 dwellings.

NEWICK, a parish in Sussex, 3 m. W of Uckfield. Area 1,966 acres. Pop. in 1851, 966.

NEWINGTON, a parish in Kent, 8 m. E by S of Rochester. Area 2,103 acres. Pop. in 1831, 730; in 1851, 731.—Also a parish in Oxfordshire, 9 m. SE of Oxford, on the E bank of the Thames. Area 3,080 acres. Pop. in 1831, 470; in 1851, 454.

NEWINGTON, an elegant modern suburb of the Old town of Edinburgh. It forms the extreme S of the city; occupies a site on the very gentle slope of the southern one of the three hills, where it nearly becomes lost in the plain; and is magnificently overlooked on the NE by the centre and most towering part of the bold curve of Salisbury-crags, and the most precipitous and picturesque face of Arthur's-seat.

NEWINGTON, a township of Rockingham co., in the state of New Hampshire, U. S., 40 m. ESE of Concord. The soil is to a great extent sandy and unproductive. Pop. in 1840, 543.—Also a village of Wethersfield township, Hartford co., in the state of Connecticut, 6 m. S of Hartford. Pop. 650.

NEWINGTON-BAGPATIN, a parish in Gloucestershire, 5½ m. WNW of Tetbury. Area 2,131 acres. Pop. in 1831, 258; in 1851, 239.

NEWINGTON-BUTTS, or **NEWINGTON-ST. MARY**, a parish and village in Surrey, 1½ m. S of London, at the termination of the Grand Surrey canal. The v. of late years has been greatly extended by the erection of modern buildings, particularly in the neighbourhood of Walworth. Area 624 acres. Pop. in 1831, 44,526; in 1851, 64,816.

NEWINGTON-GREEN, a village, partly in Stoke-Newington, and partly in Islington p., Middlesex, 2½ m. N by E of St. Paul's.

NEWINGTON-NEXT-HYTHE, a parish in Kent, 2½ m. NE of Hythe, intersected by the South-Eastern railway. Area 3,194 acres. Pop. 499.

NEWINGTON (NORTH), a hamlet in Broughton p., Oxfordshire, 2½ m. W by S of Banbury. Area 680 acres. Pop. in 1831, 318; in 1851, 436.

NEWINGTON (SOUTH), a parish in Oxfordshire, 4 m. WNW of Deddington. Area 1,460 acres. Pop. in 1831, 462; in 1851, 419.

NEWINGTON (STOKE), a parish and village in Middlesex, 3 m. N by E of London, in the line of the South-Eastern railway. The v. consists of a long street, composed of various ranges of buildings and handsome detached mansions, extending along the Cambridge-road from Kingsland to Stamford-hill. Area 639 acres. Pop. in 1851, 4,840.

NEW-INN, a village in the p. of Knockgraffon, co. Tipperary, 4 m. N by E of Cahir. Pop. in 1831, 320; in 1851, 245.—Also a hamlet in the p. of Lava, co. Cavan, 5 m. NW by N of Virginia.—Also a hamlet in co. Galway, 4 m. W by S of Killeconnel.

NEW IPSWICH, a township of Hillsboro' co., in the state of New Hampshire, U. S., 47 m. SSW of Concord. The soil is fertile, and is watered by Souhegan river and its branches. Pop. in 1840, 1,578.

NEW JERSEY. See JERSEY (NEW).

NEW JERUSALEM, a village of Bucks co., in Pennsylvania, U. S., 66 m. E of Harrisburg.

NEW KENT, a county in the E part of the state of Virginia, U. S., comprising an area of 225 sq. m., bounded on the NE by Pamunky river, and on the S and SW by Chickahominy river. Pop. in 1840, 6,230; in 1850, 6,064. The cap., which bears the same name, is 30 m. E of Richmond, and 3 m. S of Pamunky river.

NEWKIRK'S MILLS, a village of Bleecker township, Fulton co., in the state of New York, U. S., 59 m. NW of Albany.

NEWLAND, a parish in Gloucestershire, 4 m. SE of Monmouth, comprising the chapelrys of Bream and Coleford, with the tythings of Clearwell, Lee-Bailey, and Newland. Area 8,797 acres. Pop. in 1801, 2,543; in 1831, 4,046; in 1851, 4,574, a large proportion of whom are engaged in working coal-mines. The coal-tract, comprising the mining districts in the Forest of Dean, forms an elliptical basin the longest diameter of which is about 10 m., and the

shorter about 6 m. ranging round Coleford in this p. as a centre. There are about 20 beds of coal, of various thickness, containing together nearly 37 ft. of clear coal. The carboniferous strata crop out regularly all round against the mountain limestone and old red sandstone, and dip uniformly towards the centre of this basin.—Also a township in Ulverston p., Lancashire, $2\frac{1}{2}$ m. NNE of Ulverston, on the W bank of the Leven. Pop. in 1811, 374; in 1831, 491; in 1851, 460.—Also a chapelry in Great Malvern p., Worcestershire, $4\frac{1}{2}$ m. SW by S of Worcester. Pop. in 1831, 130; in 1851, 140.—Also a township in Drax p., Yorkshire, $3\frac{1}{2}$ m. NE by E of Snaith. Area 2,104 acres. Pop. in 1831, 282; in 1851, 353.

NEWLANDS, a parish in the N of Peebles-shire, 11,000 or 12,000 acres in area. The river Lyne flows in a S direction $2\frac{1}{2}$ m. along the W boundary, and $3\frac{1}{2}$ m. through the interior, and receives on its l. bank, in drainage of a large part of the p., the streams of Dead and Flemington burns. Pop. in 1851, 950.

NEWLANDS, a chapelry and township in Crosthwaite p., Cumberland, 4 m. SW by S of Keswick, on a small stream which flows into Bassenthwaite water. Pop. in 1831, 113; in 1851, 196.

NEWLANDSIDE, a township in Stanhope p., co. of Durham, $5\frac{1}{2}$ m. W of Wolsingham. Area 9,820 acres. Pop. in 1831, 847; in 1851, 537.

NEW LEBANON, a township of Columbia co., in the state of New York, U. S., 23 m. SE of Albany. It has a hilly surface, bounded on the W by Taghkanic mountain, and on the E by the Peterborough hills. Pop. in 1840, 2,536.—It contains 2 villages, one of which, named New Lebanon Shaker Settlement, is 2 m. S of New Lebanon Springs. It comprises about 3,000 acres, and is highly cultivated. Pop. about 600.—The other village, named New Lebanon Springs, is 25 m. SE of Albany, near the Massachusetts line, and near the Albany and West Stockbridge and the Hudson and Berkshire railroads. Pop. 200.—Also a village of Pasquotank co., in the state of North Carolina, 237 m. ENE of Raleigh, on the head waters of Pasquotank river, and at the S extremity of Dismal Swamp canal.—Also a village of Sullivan co., in the state of Indiana, 103 m. SW by W of Indianapolis.

NEW LEXINGTON, a village of Pike township, Perry co., in the state of Ohio, U. S., 52 m. E of Columbus, on the SE bank of Big Rush river. Pop. in 1840, 150.—Also a v. of Tuscaloosa co., in the state of Alabama, 24 m. N of Tuscaloosa, on the W side of North river.

NEW LIBERTY, a village of Owen co., in the state of Kentucky, U. S., 36 m. N of Frankfort, 3 m. E of Eagle creek. Pop. in 1840, 227.

NEW LIMERICK, a township of Aroostook co., in the state of Maine, U. S. Pop. in 1840, 123.

NEWLIN, a township of Chester co., in the state of Pennsylvania, U. S., 28 m. SW of Philadelphia.

NEW LISBON, a township of Otsego co., in the state of New York, U. S., 90 m. W of Albany. It has a hilly surface, and is drained by Butternut and Otsego creeks. The soil consists of sandy loam. Pop. in 1840, 1,909.—Also a village of Centre township, Columbiana co., in the state of Ohio, 150 m. ENE of Columbus, on the N side of Middle Fork of Little Beaver river, and on the Sandy and Beaver canal. Pop. 2,000.

NEW LONDON CROSS ROADS, a village of New London township, Chester co., in the state of Pennsylvania, U. S., 72 m. SE of Harrisburg.

NEW LYME, a township of Ashtabula co., in the state of Ohio, U. S., 195 m. NE of Columbus. Pop. in 1840, 527.

NEWLYN, a parish in Cornwall, $2\frac{1}{2}$ m. WNW of St. Michael. Area 8,010 acres. Pop. in 1831, 1,218;

in 1851, 2,152. A valuable lead-mine, and several chalybeate springs exist in this p.

NEW MADRID, a county in the SE part of the state of Missouri, U. S., comprising an area of 1,625 sq. m. Its surface is low and liable to inundation, but is in some parts very fertile. Pop. in 1840, 4,554. Its cap., which bears the same name, is 271 m. SE of Jefferson city, on the N side of the Mississippi. Pop. of township, 1,668.

NEWMARKET, a market-town, consisting chiefly of one long street, the N side of which is in Suffolk, the S in Cambridgeshire, 13 m. E by N of Cambridge, and 65 m. NNE of London, with which it is connected by the Eastern Counties railway. Area 250 acres. Pop. in 1801, 1,792; in 1831, 2,848; in 1851, 2,298. The town is pleasantly situated, the greater part of it occupying the gentle declivity of a hill. The main street is long, wide, and well-lighted; most of the houses are modern and well-built; and many of those which have been erected as residences for the nobility and gentry who attend the races, and even those of the leading jockeys and trainers, are handsome. The inns are proverbial for their good accommodations. The principal feature of the town is the New rooms, for the use of the Jockey club, situated in the centre of the town. The trade of N. depends almost exclusively on affairs connected with the turf, for which it has been long celebrated. The race-course, formed on an extensive heath in Cambridgeshire, in the immediate vicinity of the town, is 4 m. in length, and one of the finest in the kingdom. The training ground is also very fine. Previously to 1753, when the Jockey club purchased the present racing-ground, there were only two meetings in the year at N. for the purpose of running horses; there are now seven: viz., the Craven, on Easter Monday; the First spring, on Monday fortnight following; the Second spring, a fortnight after that; the July; the First October, held on the first Monday in that month; the Second October, on the Monday fortnight following; and the Third October, or Houghton, a fortnight afterwards. Those held in Easter week, and in the month of October, are the principal. At these periods the town presents an exceedingly lively and interesting appearance.—Also a parish in Flintshire, $4\frac{1}{2}$ m. NE of St. Asaph, on a small river which flows into the English channel. Pop. in 1851, 642.

NEWMARKET, a town in the p. of Clonfert, co. Cork, on the river Dullua, 4 m. NW of Kanturk. Pop. in 1831, 1,437; in 1851, 1,265.—Also a village in the p. of Aghaviller, co. Kilkenny, $1\frac{1}{2}$ m. N by W of Higginstown.

NEWMARKET, a township of Rockingham co., in the state of New Hampshire, U. S., 38 m. SE of Concord, bordered on the NE by Lamprey river, and on the SW by Exeter river, and drained by a branch of Lamprey river. Pop. in 1840, 2,730.—Also a village of Piscataway township, Middlesex co., in the state of New Jersey, 36 m. NE of Trenton, on the E bank of Cedar creek, containing in 1840 about 25 dwellings.—Also a village of Frederick co., in the state of Maryland, 67 m. NW of Annapolis, on the N branch of Bush creek.—Also a village of Shenandoah co., in the state of Virginia, 139 m. NW of Richmond, 1 m. E of the N fork of Shenandoah river, and near the SW border of the co. Pop. 800.—Also a village of Jefferson co., in the state of Tennessee, 208 m. E of Nashville, on the head waters of Loss creek.—Also a village of Marion co., in the state of Kentucky, 65 m. SSW of Frankfort, on the N side of the Rolling Fork of Salt river.—Also a township of Highland co., in the state of Ohio, 81 m. SW of Columbus. Pop. 1,302.

NEWMARKET, a village of Canada West, in the township of Whitechurch, on the E branch of Holland

river, $3\frac{1}{2}$ m. from Holland landing, and about 30 m. from Toronto. Pop. about 600. The surrounding country is fertile and well cultivated.

NEWMARKET-ON-FERGUS, a town in the p. of Tomlinlough, co. Clare, 2 m. E of the nearest point of the Fergus, and $6\frac{1}{2}$ m. SE by S of Ennis. Pop. in 1831, 1,118; in 1851, 1,111.

NEW MARLBORO', a township of Berkshire co., in the state of Massachusetts, U. S., 131 m. SW by W of Boston. It has a hilly surface, and is drained by Konkapot river and its branches. The soil is chiefly adapted to pasturage.

NEW MEXICO. See MEXICO (New).

NEW MIDDLETON, a village of Columbiana co., in the state of Ohio, U. S., 185 m. NE by E of Columbus. Pop. 118.

NEW MILFORD, a township of Litchfield co., in the state of Connecticut, U. S., 51 m. WSW of Hartford. The surface is hilly, and is watered by Housatonic river and its branches. The soil consists chiefly of sand, gravel, and clay loam. Pop. in 1840, 3,974. It contains a village consisting of about 60 dwellings.—Also a village of Warwick township, Orange co., in the state of New York, 120 m. S by W of Albany.—Also a township of Susquehanna co., in the state of Pennsylvania, 185 m. N of Harrisburg. It has a hilly surface, and is drained by Mitchell's and Salt Lick creeks. Pop. 1,148. It has a village containing about 25 dwellings.

NEWMILL, a village in the p. of Keith, in Banffshire, on the l. bank of the Isla, $1\frac{1}{2}$ m. N of Keith. Pop. in 1851, 449.

NEWMILLS, a hamlet in the p. of Ross, co. Cork.—Also a village in the p. of Tullanishen, co. Tyrone, $1\frac{1}{2}$ m. NW of Coal-Island, and 3 m. NNE of Dungannon.—Also a village in the p. of Torryburn, in Fifeshire, a $\frac{1}{2}$ m. W of Torryburn.

NEWMILN, a village in the parish of Loudoun, in Ayrshire, on the r. bank of the Irvine, $2\frac{1}{2}$ m. E of Galston. Pop. in 1851, 2,211, chiefly muslin-weavers.

NEWMINSTER-ABBEY, a township in Morpeth p., Northumberland, $\frac{1}{2}$ m. W of Morpeth. Pop. in 1851, 125.

NEW-MOAT, a parish in Pembrokeshire, South Wales, on the river Sefeynfy, 10 m. NE of Haverford. Pop. in 1831, 331; in 1851, 333.

NEWNAN, a village of Coweta co., in the state of Georgia, U. S., 106 m. W by N of Milledgeville, consisting in 1840 of about 20 dwellings.

NEWSANSVILLE, a village of Alachua co., in the state of Florida, U. S., 120 m. ESE of Tallahassee.

NEWNHAM, a parish and market-town in Gloucestershire, 11 m. WSW of Gloucester. It has been proposed to build over the Severn, which is here 1,500 ft. wide, a suspension-bridge of two arches, each 45 ft. in span, the whole length with the side-openings being 1,125 ft. An unsuccessful attempt was made to form a tunnel under the river in 1811. At present there is only a ferry navigable half-an-hour before and after high water. The rise of the tide here is from 15 to 19 ft., and from flood-tide to high water is only $1\frac{1}{2}$ hour. The tide comes in with a bore 4 or 5 ft. in height, which lasts for a few minutes, and then runs at the rate of $5\frac{1}{2}$ or 6 m. per hour. Area 2,105 acres. Pop. in 1801, 821; in 1831, 1,074; in 1851, 1,288.—Also a parish in Herefordshire, $2\frac{1}{2}$ m. N of Baldock, on the river Ivel. Area 951 acres. Pop. in 1801, 72; in 1821, 157; in 1851, 150.—Also a parish in Kent, 5 m. SW by W of Faversham. Area 1,293 acres. Pop. in 1831, 436; in 1851, 431.—Also a parish in Hants, $4\frac{1}{2}$ m. E by N of Basingstoke, intersected by the London and Southampton railway. Area 1,009 acres. Pop. in 1801, 260; in 1831, 329; in 1851, 360.—Also a ham-

let in Lindridge p., Worcestershire, $3\frac{1}{2}$ m. E of Tenbury, on the S bank of the Teme.

NEWNHAM-COURTNEY, a parish in Oxfordshire, $5\frac{1}{2}$ m. SSE of Oxford. Area 1,740 acres. Pop. in 1831, 314; in 1851, 351.

NEWNHAM-MURREN, a parish in Oxfordshire, 11 m. NW by W of Henley-upon-Thames, on the E bank of the Thames. Area 1,830 acres. Pop. in 1831, 249; in 1851, 237.

NEWNHAM-REGIS, a parish and village in Warwickshire, 4 m. NW by W of Rugby, on the N bank of the Avon. The Oxford canal passes 1 m. N of the v., and the London and Birmingham railway 1 m. S. Area 1,418 acres. Pop. in 1831, 139; in 1851, 119.

NEW NORFOLK, a parish and town of Tasmania, in the co. of Buckingham, and hundred of New Norfolk. The p. is bounded on the N by the river Derwent; on the W by the Plenty; and on the E by the p. of Wellington, from which it is separated by the Lachlan. The town is on the Derwent, 21 m. from Hobartown.—Also a police district, bounded on 3 sides by Hobartown, Clyde, and Richmond districts, comprising an area of about 50 m. in length from E to W, and 30 m. from N to S, with a total superficies of 1,500 sq. m. It consists of two parts, viz., the basin of the Derwent and a fertile tract, including the Black Brush, skirting the W side of the Jordan, and is intersected by two ranges of hills, one of which runs in a NW direction in crescent form from Mount-Wellington to the peak of Teneriffe.—Also a village in the co. of Northumberland, on Dory creek, about 25 m. from Gosford.

NEWNTON (Long), a parish in Wiltshire, $3\frac{1}{2}$ m. NNW of Malmesbury. Area 2,289 acres. Pop. in 1831, 307; in 1851, 294.

NEW OHIO, a village of Coleville township, Broome co., in the state of New York, U. S., 127 m. WSW of Albany.

NEW ORKNEY, or POWLES GROUP, a group of islands, in New North Shetland, to the W of Sandwich islands, in S lat. 60° , and W long. 45° .

NEW ORLEANS, a city and port of Louisiana, U. S., situated in a bend of the Mississippi, on its l. bank, 105 m. by the river, and 90 m. in a direct line from the Balize, at its mouth; in N lat. $29^{\circ} 57'$, W long. $90^{\circ} 6'$; 1,203 m. from Washington, and 1,307 m. from New York, about 1,000 m. below the mouth of the Ohio, about 1,200 m. below the mouth of the Missouri, and nearly intermediate between Boston and Mexico. It is the seat of government for the state, and the grand commercial metropolis of the Mississippi valley. No city on the globe possesses greater natural advantages for a commercial capital. The Mississippi—here 746 yds. wide at low water, and 852 yds. at high water—and its tributaries above the city, present an extent of more than 20,000 m. of water, navigated by steam-boats, and passing through the richest soils and the pleasantest climates. Its communication also with the ocean is easy; and numerous bayous or creeks connect it with every part of the state. By a basin and canal, and Bayou St. John, it communicates with Lake Pontchartrain, and the line of lakes thence to the gulf of Mexico, the opposite Florida shore, Mobile, Pensacola, and the whole Gulf-shore, E and W. A railroad also runs between the city and Lake Pontchartrain, $4\frac{1}{2}$ m. long, with only 16 inches ascent and descent,—and an artificial harbour and breakwater has been formed in the lake at the end of this railroad. The Mississippi and its principal branches are admirably adapted for steam-boat navigation, and also for the descent of those cheap and capacious vessels, the flat-bottomed boats. See article MISSISSIPPI. The use of steam-boats in towing ships now renders it unneces-

sary to wait, either at the city or below it, for favourable winds. The forts erected for the defence of the city, during the last war, have been improved, and others have been erected; and the constantly increasing strength of the city itself, and its facilities for receiving the growing strength of the whole Mississippi valley, render it comparatively secure from foreign invasion.

General description.] The old city, properly so called, is built in the form of a parallelogram, of which the longer sides are 1,320 yds., and the shorter, or the depth of the city towards the swamp, 700 yds. Above the city are the faubourgs or the suburbs of St. Mary and Annunciation; below, the suburbs Marigny, Daumois, Declouet. Between the city and Bayou St. John are the villages St. Claude and St. Johnsbury. The old city is divided into 66 squares, each having a front of 319 ft. in length, and each divided into twelve lots. Few of the streets, except Canal street, are more than 40 ft. wide. The wooden buildings, of which the city was formerly composed, have mostly given place to those of brick. In the old city, the French and Spanish styles of building predominate. The houses are stuccoed externally, of a white or yellow colour. The faubourg St. Mary, and other new parts of the city, are built principally of brick, after the American style. Several warehouses, with stone fronts, have been erected. In general, it may be said that the city is gradually becoming more purely American in all its characteristics; but a great portion of its inhabitants are of French and Spanish descent, and the French language is perhaps more used here than the English. During the season of most active business, the manners, dress, customs and languages of the world at large seem to be exhibited in New O.; those who desire to witness a display of the commodities of all climates, and all countries, with the costumes and languages of civilized and uncivilized men and women, may do well to visit the market of New O., especially on a Sunday morning in February or March. The public buildings are in general commodious and elegant. The cathedral or church of St. Louis, on the Place d'Armes, strikes the stranger forcibly by its venerable and antique contour. It was founded in 1792. On the r. and l. of the cathedral are buildings devoted to public offices. The old state-house, formerly the charity hospital, occupies a whole square fronting on Canal-street, and is, surrounded by ornamental pleasure-grounds. Previous to the removal of the capital, the centre building was occupied by the legislature, and the wings by offices for the governor and chiefs of departments. The new charity hospital is 290 ft. long, and 3 stories high, and is entered under a Doric portico. The lower part of the building is occupied by the resident physicians, and as lecture-rooms, for medical students; while the second and third stories are divided into wards for the patients and rooms for the sisters of charity. The hospital is calculated to hold 540 patients. The grounds around are handsomely laid out, and kept in good order. This hospital is peculiarly well-adapted for the reception of such as are attacked with the virulent fevers, which annually invade the city, and cause such devastation especially on unacclimated foreigners. The Franklin infirmary is a private hospital, capable of accommodating 200 patients. The churches are alike conspicuous for their varied styles of architecture and the substantial manner in which they are built. Many have the sombre tint and gloomy aspect of ancient times, while others exhibit the decorative style of modern taste. The markets are large and convenient. Poydras-street market is 402 ft. long, and 42 ft. wide. The vegetable market is 172 ft. long. St. Mary's market is a noble structure,

built of brick, covered over in imitation of granite, 480 ft. long and 42 ft. wide. All the markets are well supplied with both the necessities and luxuries of life. The theatres are conspicuous buildings, and celebrated for their elegance and accommodations. The most magnificent of these is the St. Charles, which is 132 ft. long by 175 ft. deep. From the centre of the dome is suspended a chandelier, 12 ft. high and 36 ft. in circumf., weighing 4,200 lbs., and lighted by 176 gas jets. The other fittings are on an equally magnificent scale. The Orleans is a spacious edifice, of the Roman Doric and a mixture of the Corinthian and composite orders. The performances in this theatre are in the French language. The Campbell-street or American theatre, is 160 by 60 ft., and can accommodate 1,100 persons. Among the buildings of New O., the various cotton presses are not the least imposing in appearance. The Orleans cotton press extends over an area of 194,656 ft., which is nearly covered with buildings. On an average it presses 200,000 bales of cotton annually, but its capacity is much larger. The banks, hotels, &c., are also immense edifices. The St. Charles' hotel is world-renowned for its magnificence, and the sumptuous fare it provides for its visitors. The United States branch mint is a noble structure, 282 ft. long and 108 ft. deep, with two wings, each 29 by 81 ft., and the whole three stories high. The Custom-house is also a neat building.—There are, besides the new university, two colleges in New O., 10 academies, and 30 or 40 primary and common schools. A special session of the legislature was called, in 1848, to take into consideration the extension of schools throughout the state, and to regulate other matters connected with the education of the people. The harbour is one of the most capacious and deep in the world, and the local conveniences for shipping and the transaction of an extensive business, are unsurpassed. The number of vessels, of all kinds, visiting New O. during the year, is immense, and a regular communication by packets is kept up with all the large Atlantic cities, and those on the gulf. It is, in fact, the great receiving and distributing depot of the whole W., and the greatest cotton mart in the world. Nothing seems adverse to the growth of New O., except the unhealthiness of its climate. The surface of the city is from 3 to 9 ft. below the level of the river at high water, and the adjacent country is all low and marshy: this is, doubtless, the principal cause of the frequent occurrence of the yellow fever. The legislature have taken active measures for draining, raising, and otherwise improving it. The streets are now paved, and places of stagnant water are drained or filled. New O. is supplied with water from the Mississippi, the water of which is raised into a reservoir 250 ft. square. Mains are laid in all the streets to lead the water; and a large pipe, 1 m. long, is used to distribute water to clean and cool the streets in hot weather.

Commerce.] The following are the returns of the leading articles of produce received at New O. for the 4 years specified, ending each year on 31st August:

	1846.	1849.	1850.	1851.
Bagging,	917,710 d.	1,167,056 d.	816,498 d.	903,800 d.
Bale rope,	255,051	1,119,864	688,832	804,108
Cotton,	33,716,256	\$0,844,314	41,886,150	48,756,764
Molasses,	1,710,000	2,288,000	2,400,000	2,625,000
Sugar,	10,266,750	8,800,000	12,396,150	12,678,180
Tobacco,	4,146,562	3,938,290	6,206,820	7,860,050
All other,	26,184,135	53,882,168	52,603,408	53,296,109

Total, 77,193,464 d. 81,989,692 d. 96,897,873 d. 106,924,083 d.

showing an increase of 29,000,000 d. since the tariff of 1846 went into operation, although the receipts even then reached a higher value than is recorded

in any preceding year, and although many of the articles have declined in price under the increased supply. Cotton, sugar, and tobacco form the great articles of export.

Cotton trade. From the *New Orleans Price Current* it appears that the value of products received from the interior during the year ending August 31st, 1852, was 108,000,000 d. The receipts of cotton during the same period at New O. reached nearly 1,500,000 bales. The southern papers agree that there had never been a year in which the results of the cotton trade had been more satisfactory. The average weight per bale was 438 lbs., making 626,000,000 lbs. The following table shows the product of low middling to good middling cotton, taking the average of each entire year for seven years, with the receipts at New O., and the total crop of the United States:

	Total crop.	Receipts at New O.	Average price.
	Bales.	Bales.	Cents per lb.
1845-46.	2,100,537	1,041,393	6½
1846-47.	1,778,651	707,324	10
1847-48.	2,347,634	1,188,733	6½
1848-49.	2,728,596	1,100,636	6½
1849-50.	2,096,706	797,387	11
1850-51.	2,335,237	995,036	11
1851-52 (estimated).	3,000,000	1,429,183	8

The entire receipts from all sources at New O. during the year ending 31st August, 1852, was 1,429,183 bales,—an increase of nearly 450,000 bales over the year previous. The entire exports for the same time were 1,435,815 bales: 772,242 of which were shipped to Great Britain; 196,254 to France; 210,607 to other foreign ports; and 256,712 to other ports in the United States. The increase of exports consisted in 189,869 bales to Great Britain; 65,892 to France; 78,701 to other foreign ports; and 103,895 to home ports. There is in this last figure an item of importance: for it is an unanswerable argument to the assertions of the tariff and protection men, that their cotton manufacturers were breaking down. The following table shows the date of receipt of first bale of each crop at New O., and the total receipts at this port as compared with the whole crops for 10 years from 1841 to 1851:

Date of receipt of first bale.	Total receipts at New Orleans.	Total crop of United States.	Tot value. Dollars.
1841-42.	1841-42.	1,075,394	2,378,875
1842—July 25.	1842-43.	1,075,394	2,378,875
1843—Aug. 17.	1843-44.	850,342	2,030,409
1844—July 23.	1844-45.	954,285	2,394,503
1845—July 30.	1845-46.	1,041,393	2,109,537
1846—Aug. 7.	1846-47.	707,324	1,778,651
1847—Aug. 9.	1847-48.	1,188,733	2,547,634
1848—Aug. 6.	1848-49.	1,090,797	2,728,596
1849—Aug. 7.	1849-50.	797,387	2,096,706
1850—Aug. 11.	1850-51.	950,220	2,355,237
1851—July 25.	1851-52.	1,429,183	*5,000,000
			48,592,222
			278,979,976

It will be seen by the above table that the cotton alone sold in this market within the past 10 years has yielded a gross product of 378,979,976 dollars.

Sugar trade, &c. The sugar crop of Louisiana of 1851 amounted to 257,138,000 lbs. Of this quantity there were 203,922 hhds. brown sugar made by the old process, and 32,925 hhds. refined, clarified, &c., including cistern bottoms. This was the produce of 1,474 plantations, of which 914 are worked by steam and 560 by horse-power, and the result shows only a moderate yield, as the cane generally was not well matured, besides which the loss by *craques* is estimated to have been about 10,000 hhds. The crop also presented a low average in quality, as, besides the immature condition of the cane, it was somewhat injured by frost. The estimated stock on hand at the close of 1850 was 2,200 hhds., and this amount added to the crop of 236,547 hhds. would make a supply of 238,747 hhds. The distribution of this supply was nearly as follows: Shipments out of the State, 53,000 hhds.; consumption of the city and neighbourhood, 18,000 hhds.; taken for refining in the city and State, including cistern-bottoms, 15,000 hhds.; stock on hand estimated at 3,900 hhds.; leaving, as the quantity taken for the week, 149,547 hhds. The quantity shipped from New O. to Atlantic ports is 42,000 hhds., against 45,000 hhds. in 1850, and 90,000 the year previous. Besides the Louisiana crop, there were imported into New O. from Cuba 1,781 hhds. and 25,678 boxes; from Brazil, 1,591 cases and boxes, 80 barrels, and 7,689 bags; and from Manila, 14,224 bags. The whole of the imports from Brazil and Manila, and a great portion of those from Cuba, were for a St. Louis refinery.—Coffee may now be said to take the lead among the foreign imports of New O. The first direct cargo from Rio was in 1835, and up to 1840 the imports only amounted to 44,600 bags; while in the same year 91,000 bags were received from Cuba, &c. The following table, which shows the direct imports from Rio-de-Janeiro in each year for 10 years, exhibits the rapid increase in this branch of foreign trade:

1842.	126,210 bags.
1843.	85,438
1844.	161,082

1845.	107,660
1846.	213,031
1847.	205,111
1848.	239,371
1849.	299,129
1850.	225,013
1851.	274,690
1852.	353,616

Shipping. The tonnage which entered the port of New O. in 1832 amounted to 253,061 tons; in 1837 to 373,460 tons; in 1841 to 521,644 tons. The total number of arrivals from sea between the 1st of September, 1851, and 1852, was 2,351, viz., 807 ships, 213 steam-ships, 371 barks, 287 brigs, and 673 schooners. The entries at the custom-house for the year ended the 30th June, 1851, were as follows:—Whole number of vessels, 2,266 = 910,855 tons. Increase compared with last year is 212 vessels = 142,827 tons. Included in the arrivals were 412 foreign vessels from foreign ports, with a total measurement of 185,386 tons. This was an increase on 1851 of 80 vessels = 48,388 tons.

In consequence of the frequent interruption of navigation in the tributaries of the Mississippi, and even in the Mississippi itself, there have frequently been unnecessary fluctuations in the prices of the two great staples of the south; and southern men have come to the conclusion that they have depended too exclusively upon the river-navigation as the highway for transmitting the products of the interior to the sea-shore, and they are looking about for some efficient remedy. A considerable number of conventions and public assemblies have been held to take into consideration the organization of a system of railroads, by which a more reliable mode of transit shall be secured for the products of the interior, and two very important routes have been settled upon, and will doubtless be carried forward to completion as soon as possible. Those restrictions which formerly were laid upon the city of New O. and the state of Louisiana by their constitution have recently been removed, and another serious obstruction is being removed. The chamber of commerce of New O. not long since made such representations to Congress as induced that body to make an appropriation for removing the obstacles to the free navigation of the outlets of the Mississippi. It was demonstrated that the merchandise passing inward and outward to and from New-O. exceeded 200,000,000 dol. per annum; and it is well known that the obstructions to the free passage of vessels to and from the gulf of Mexico have hitherto been almost insurmountable.—Commercial operations at New O. are immensely facilitated by lines of electric telegraph, one of which extends from New O. to Burlington, on the frontier of Canada, a distance of 2,600 m., passing through Mobile, Augusta, Colombia, Raleigh, Richmond, Philadelphia, Baltimore, Washington, New York, and Boston. A second principal line ascends the valleys of the Mississippi and the Ohio, from New O. to Louisville, a distance of 1,150 m. These lines are not always made to follow the railways, but generally take the shortest course, and this on account of the great distances which mostly separate the principal stations. The wires are suspended on posts of wood insulated on glass rollers, and often consist but of one or two; but when they pass by a river or arm of the sea they are enclosed in gutta percha tubes, and sunk under water. The telegraph from New York to Washington passes thus under 4 miles of sea. The construction and repair of these telegraphs are submitted to the most rigid economy, and frequently the farmers through, or by whose lands they pass, undertake to keep them in order for the liberty of using the telegraph.

Population. The pop. of New O. in 1810 was

17,242; in 1820, 27,176; in 1830, 46,310; in 1840, 102,193, of whom 23,448 were slaves; in 1850, 119,285.—The average annual mortality amounts to 5.99 per cent. It appears that in a period of 9 years, from 1st January 1841 to 1st January 1850, there were 73,216 patients admitted into the New O. charity hospital; and that during 25 years the average mortality of yellow fever cases in this hospital was 44 per cent.

NEW PALTZ, a township of Ulster co., in the state of New York, U. S., 74 m. S by W of Albany. It is watered by Hudson and Walkill rivers. Pop. in 1840, 5,408. The village is on the Walkill, and contained in 1840 about 250 inhabitants.

NEW PARIS, a village of Jefferson township, Preble co., in the state of Ohio, U. S., 106 m. W by S of Columbus, on the W bank of Whitewater river. Pop. in 1840, 400.

NEW PETERSBURG, a village in Tuscawawas co., in Ohio, U. S., 79 m. SW of Columbus. Pop. 350.

NEW PHILADELPHIA, a village in Tuscawawas co., in Ohio, U. S., 115 m. ENE of Columbus, on the E bank of the Tuscawawas, opposite the junction of Sugar creek. Pop. 500.—Also a v. in Washington co., in Iowa.

NEW PITTSBURG, a village in Wayne co., in Ohio, U. S., 92 m. NE of Columbus. Pop. 150.

NEWPORT, a borough in St. Stephen's p., Cornwall, adjacent to Launceston, and included within the par. boundary of that borough. Pop. in 1801, 738; in 1831, 1,084; in 1851, 934. — Also a parish in Essex, $3\frac{1}{2}$ m. SSW of Saffron-Walden, in the line of the Eastern Counties railway, which has a station here. Area 1,714 acres. Pop. in 1831, 914; in 1851, 898.

NEWPORT, a borough, market-town, and seaport, in the lower division of the hundred of Wentloog, Monmouthshire, 24 m. SW by S of Monmouth, and 27 m. (by water) NNW of Bristol, with which city daily steam communication is kept up. It is situated on the west bank of the river Usk, about 4 m. above its entrance to the Bristol channel, and is approached by a stone-bridge of 5 arches, the centre one of 75 ft. span, erected in 1800. Adjoining the bridge are the remains of the ancient castle, built by Robert, Earl of Gloucester, a natural son of Henry I.; and a little higher up the Usk is a handsome bridge connected with the South Wales railway, which line passes through N., connecting it on one hand, by Gloucester, with the metropolis, and on the other with Milford Haven. N. has grown rapidly to commercial importance. Towards the close of last century it was described as a "straggling range of gloomy buildings." It is now the busiest town of Monmouthshire, comprising 3 principal, and over 20 subsidiary streets, all well-paved and lighted with gas; and by a junction with Pillgwenlly, now incorporated with the borough, it stretches for more than a mile in the direction of the river's mouth. The parish church, of Norman architecture, stands on an eminence at the N. portion of the town. The district church of St. Paul's, one (at Pillgwenlly) of the Holy Trinity, and several places of worship for Roman Catholics and Dissenters, and the Town-hall, an edifice completed in 1843, comprising also the police and county courts, atheneum, mechanics' institute, and commercial rooms, are its noticeable buildings. The pop. of N. in 1801 was 1,423; in 1811, 3,025; in 1831, 7,062; in 1841, 13,766; in 1851, 19,542; and it is rapidly increasing. Water is supplied by a share company established in 1846. N. owes its rapidly increasing prosperity to its immediate contiguity to the great iron and coal works of Monmouthshire, and to the facilities afforded for shipment of those commodities from its port. The only

other article of considerable export is bark. Its imports consist of provisions, timber, and iron ore. The coal of the district is chiefly suited to household purposes, but the Risca collieries in the neighbourhood furnish steam-coal of the highest quality, from which the large ocean steam-ships are supplied. Among the great iron-works connected with N. are the Ebbw Vale, Sirhowy, Victoria, British, and Cwmbrain, colossal establishments of the Coalbrook Dale Company; the works of the Messrs. Baily at Nantyglo and Beaufort; and the several establishments of the Tredegar, Cwm Celyn and Blaina, Rhymney, Blaenavon, Pentwyn and Pontypool iron companies. N. has a railway to Pontypool, (intended to be extended to Blaenavon) and thence by the Hereford line to that city; it is also the terminus of the Western Valley's line, communicating with Blaina, Sirhowy, Tredegar, and Ebbw Vale. Canal accommodation to Pontypool, Cwmbrain, Abergavenny, and Brecon also exists. The river Usk is navigable by ships of large burthen, and many fine vessels are built and launched from its banks. In 1829 there belonged to the port 50 vessels = 3,824 tons; in 1852, 89 vessels = 12,729 tons. To accommodate the growing trade of the port, magnificent docks and wharfs were completed in 1842, at a cost of £200,000. In 1844-5, there entered these docks 528 vessels = 103,300 tons; in 1852-3, 637 vessels = 166,839 tons. In 1800, the tonnage of vessels entered inwards at N. was 213 tons; the total exports 18,375 tons. In 1852 the return stood: entered inwards—foreign, 113 vessels = 18,666 tons—coastwise, 1,332 = 77,826 tons; besides 106 foreign ships, with a tonnage of 33,229 in ballast. Entered outwards—foreign, 708 vessels = 188,657 tons—coastwise, 6,637 vessels = 371,595 tons. The annual assessed value of the property in the borough in 1840, was £32,000; in 1853, £58,879. The annual value of real property in 1851, was £11,990.—The borough unites with Monmouth and Usk in returning a member to parliament, and its limits comprise Pillgwenlly and a small portion of Christ-church on the opposite bank of the Usk. The number of parliamentary voters in 1852 was 1,167, of whom 22 were freemen. N. is a polling place in the county elections. It was the scene of a serious Chartist insurrection in 1839.

NEWPORT, the capital of the Isle of Wight, is $4\frac{1}{2}$ m. S of West Cowes, and 17 m. SSE of Southampton, on the l. bank of the Medina. Two rivulets, the Kitbridge and the Carisbrooke, confluent at the town, fall into the Medina at the quay, and render navigation practicable to the sea by small vessels. The guild-hall, the library or hall of the literary institution, two assembly-rooms, and a small theatre are the noticeable civil buildings. The old church is a spacious but quaint low fabric of three aisles, separated by pointed arches, and situated in the centre of one of the open areas of the town.—The house-of-industry, the general poor's house of the island, comprising a principal building 300 ft. long, and 27 ft. broad; and another 170 ft. long, stands about 1 m. N of the town, amidst a tract of 80 acres.—Opposite to it is the Parkhurst prison, recently instituted as a reformatory for young convicted felons, on the site of an old military depot. It has accommodations for 320 prisoners, who are treated on the plan of a model prison. The buildings consist of various parallel ranges two stories high, and 40 feet apart, and so disposed as to enclose a central quadrangular area. The principal range measures 163 $\frac{1}{2}$ ft. in length. The house and offices of the governor are in the central quadrangle; the school-rooms, a series of airy apartments, adjoin them; and the chapel occupies a detached position, and is equi-

distant from all the extremities of the establishment. The buildings are enclosed with a lofty wall; and occupy a pleasant and salubrious site, a square area of about 4 acres, on the face of an ascent, $1\frac{1}{2}$ m. N of Newport. The cost of diet per week, for each prisoner, in 1841, was 2s. 3d., or £6 4s. 9d. per annum.—A lace factory, on the r. bank of the Medina, employs about 200 persons on the premises, and 700 or 800 in their own houses. There is no other manufacture. N. depends principally for its prosperity on its being the chief market-town of the island. Two Episcopal chapels have recently been erected in the town; and there are chapels belonging to Independents, the Wesleyan Methodists, Primitive Methodists, Unitarians, Baptists, and Roman Catholics. The present parl. and municipal borough comprehends all the ancient borough, and a large part of the p. of Carisbrooke. The corporation income in 1840-1, was £626. Area of the chapelry of N. 80 acres. Pop. in 1801, 3,585; in 1831, 4,081; in 1841, 3,858. Pop. of the old municipal borough, in 1821, 4,269; in 1831, 4,318; of the new parl. burgh in 1841, 6,330; in 1851, 8,047. N. sends 2 members to parliament. Electors in 1848, 663.

NEWPORT, a parish and market town in Salop, 17 m. ENE of Shrewsbury, intersected by a branch of the Birmingham and Liverpool canal. Area 800 acres. Pop. in 1801, 2,307; in 1831, 2,745; in 1851, 2,906. The town of N., situated on the river Strove, is irregularly built, but contains some good houses. The trade of this place has been considerably increased by the formation of a branch-canal, connecting the Birmingham and Liverpool with the Shrewsbury canal. In the neighbourhood are mines of coal, iron, and limestone.

NEWPORT, a river of co. Mayo, issuing from Lough Beltra, and flowing WSW past the town of Newport-Pratt, to the NE corner of Clew bay. Though tidal over only a $\frac{1}{2}$ m., and navigable over even that distance only by boats, yet it falls only 61 ft. from Lough-Beltra, and less than 150 ft. from the summit-level of the country between Clew bay and Killala bay. The chief affluents of the N. river are the Skeedagh, the Buckadon, and the Glenisland.

NEWPORT, a village of Upper Canada, in the township of Brantford, on the Grand river, 4 m. SE of Brantford.

NEWPORT, a village of New South Wales, in Northumberland co., 3 m. from Gosford, on Dory creek.

NEWPORT, a township of Lower Canada, in the co. of Sherbrooke, between Eaton and Ditton. It is in some parts hilly, but is generally fertile, and possesses good timber. It is intersected by North river, and by several tributaries of that river and of Newport river, by which it is watered in the SW. Pop. 94.

NEWPORT, a county of the state of Rhode Island, U. S., comprising the island of that name and several other islands in Narraganset bay, and containing a surface of 136 sq. m. Pop. in 1840, 16,874; in 1850, 20,609. Its capital, which is also semi-capital of the state, is on the SW side of Rhode Island, 5 m. from the ocean, and 30 m. S by E of Providence. It is finely situated on a gentle acclivity, which rises gradually from the harbour, and contains numerous churches, a synagogue, and several public buildings. Pop. in 1840, 10,924. The harbour, which is one of the finest in the United States, is semi-circular in form, and spreads westward before the town. It is safe, capacious, and easy of access, and has depth sufficient for vessels of the largest size. It is defended by Fort Adams, which stands on Brenton's Point, and Rhode Island, $1\frac{1}{2}$ m. WSW of the town, and is garrisoned by 4 companies of artillery. The shipping of the harbour

in 1840, amounted to 10,924 tons.—Also a township of Penobscot co., in the state of Maine, 54 m. NE of Augusta. It contains a large pond, the outlet of which forms the source of Sebasticook river. The soil is generally fertile. Pop. in 1840, 1,138.—Also a township of Sullivan co., in the state of New Hampshire, 39 m. W by N of Concord. The surface is hilly, and is watered by Sugar river. The soil is fertile, especially on the streams. Pop. 1,958.—Also a township of Orleans co., in the state of Vermont, 64 m. N of Montpelier. It is bordered by Canada on the E; by Lake Memphremagog on the NE; and is watered by the head branches of Misisque river. Pop. 591.—Also a township of Herkimer co., in the state of New York, 86 m. NW of Albany. It has a hilly surface, and is drained by West Canada creek. The soil consists chiefly of sand and calcareous loam. Pop. 2,020. It has a village containing about 450 inhabitants.—Also a village of Dover township, Cumberland co., in the state of New Jersey, 79 m. S by W of Trenton, on Nantuxet creek, 5 m. above its mouth. It contained in 1840, about 30 dwellings.—Also a village of Juniata township, Perry co., in the state of Pennsylvania, 28 m. NW of Harrisburg, on the W bank of Juniata river, above the confluence of Little Buffalo creek. Pop. 423.—Also a township of Luzerne co., in the same state, 8 m. SW of Wilkesbarre, watered by Nanticoke river. It abounds in anthracite coal, and in iron. Pop. 1,099.—Also a village of Cooke co., in the state of Tennessee, 232 m. E by S of Nashville, on the SW side of French Broad river. Pop. 150.—Also a village of Campbell co., in the state of Kentucky, 86 m. NNE of Frankfort, on Ohio river, above the confluence of Licking river, and opposite Cincinnati. It stands on an elevated plain, and contains an arsenal, and an academy endowed with 6,000 acres of land.—Also a township of Washington co., in the state of Ohio, 118 m. ESE of Columbus, on the Ohio. Pop. 1,228.—Also a village of Vermilion co., in the state of Indiana, 78 m. W of Indianapolis, on the S side of Vermilion river, 2 m. above its junction with the Wabash. Pop. 192.—Also a village of Franklin co., in the state of Missouri, 70 m. E of Jefferson city, on high bluffs about a mile from the Missouri.

NEWPORT (NORTH and SOUTH), rivers in the state of Georgia, U. S., the former of which has a course of 25 m., and is navigable to Riceboro. The latter discharges itself into St. Catharine's sound.

NEWPORT, or NEWPORT-PRATT, a small port in the parish of Burrisboole, co. Mayo, on the Newport river, $5\frac{1}{2}$ m. N of Westport. The quays are excellent and extensive; and the harbour is spacious and of easy entrance, and can bring up to the quays vessels of 300 or 400 tons. Considerable shipments of corn were formerly made at N. Pop. in 1831, 1,235; in 1851, 984.

NEWPORT-PAGNELL, a parish and market-town in Bucks, 15 m. NE by E of Buckingham, and 4 m. E of Wolverton, on the banks of the Ouse, over which there are here two stone-bridges. Area 3,220 acres. Pop. of p., in 1801, 2,048; in 1831, 3,385; in 1841, 3,569; in 1851, of town, 3,312. The town is well-built, and is divided into two unequal portions by a small stream called the Louvet. The church, a handsome edifice rebuilt in 1828, occupies an eminence from which extensive views of the surrounding country are obtained. The manufacture of lace gives employment to a considerable number of females.

NEWPORT, or TREFDRAETH, a parish and seaport of Pembrokeshire, 17 m. N by E of Haverford West. Pop. in 1801, 1,392; in 1851, 1,716. This place has considerably declined in consequence of

the contiguity of Fishguard; its bay, however, still forms an excellent harbour.

NEWPORTAGE, a village of Norton township, Medina co., in the state of Ohio, U. S., 119 m. NE by N of Columbus.

NEW PORTLAND, a township of Somerset co., in the state of Maine, U. S., 56 m. NNW of Augusta. It has a fertile soil, and is watered by Seven Mile Brook and its branches.

NEWPORT-TIP, a market town in the p. of Kilvolane, co. Tipperary, on the Mulkern rivulet, 5 m. ENE of Castle-Connell. Pop. in 1851, 1,112.

NEWPORTVILLE, a village of Bristol township, Bucks co., in the state of Pennsylvania, U. S., 116 m. E of Harrisburg, on Neshaminy creek, which is here crossed by a stone bridge. In 1840 it contained about 15 dwellings.

NEWPORT-WALLINGFEN, a township in Eastington p., Yorkshire, $4\frac{1}{2}$ m. W of South Cave, crossed by the Market Weighton canal, and $1\frac{1}{2}$ m. N of the Selby and Hull railway. Area 250 acres. Pop. in 1831, 367; in 1851, 373.

NEW PRESTON, a village of Washington township, Litchfield co., in the state of Connecticut, 43 m. W by S of Hartford, on the W side of East Aspetuck river.

NEW PROSPECT, a village of Franklin township, Bergen co., in the state of New Jersey, U. S., 87 m. NE of Trenton, on Hohokus creek.—Also a village of Spartanburg district, in the state of South Carolina, 117 m. NW of Columbia.—Also a village of Greene co., in the state of Alabama, 57 m. SW of Tuscaloosa.—Also a village of Milton township, Wayne co., in the state of Ohio, 110 m. NE of Columbus.

NEW PROVIDENCE, a township of Essex co., in the state of New Jersey, U. S., 13 m. SW of Newark. It is hilly, especially in the W. The soil consists chiefly of clay loam and shale. Pop. in 1840, 832.—Also a village of Lancaster co., in the state of Pennsylvania, 46 m. E by S of Harrisburg.—Also a village of Montgomery co., in the state of Tennessee, 47 m. NW of Nashville.—Also a village of Clark co., in the state of Indiana, 107 m. S by E of Indianapolis.

NEW PROVIDENCE, one of the Bahama islands, occupying a central position in the group, and containing Nassau, the seat of government. It is 17 m. in length from E to W, and 7 m. in breadth. It is more hilly than most of the islands, but has a few tracts of fertile land, and produces good fruit, especially pine apples. Its pop. in 1832 amounted to 6,208, of whom 4,781 were coloured and Negroes; in 1842, the pop. was 7,560; in 1851, 8,385. It is the main entrepot for the productions of the other islands. See **NASSAU** and **BAHAMA ISLANDS**.

NEW QUAY, a fishing-village and harbour in the vicinity of the village of Burten, and on the N coast of co. Clare. In the vicinity are the celebrated oyster-banks of Burten.

NEWTRABUNG, a lofty eminence of New South Wales, in the co. of Northumberland, about 3 m. from Gosford, Brisbane Water.

NEW RICHMOND, a village of Ohio township, Clermont co., in the state of Ohio, U. S., 116 m. SW of Columbus, on Ohio river, above the mouth of Muddy creek. Pop. in 1840, 900.

NEW RIVER, a river of the state of South Carolina, U. S., which has its source in Beaufort district, runs nearly parallel with the Savannah, and enters by several embouchures into Tybee sound.—Also a river which has its source in the state of North Carolina, enters the state of Virginia, and after passing through Peter's mount takes the name of Great Kanawha river.—Also a river of the state of North

Carolina, which discharges itself by New River Inlet into the Atlantic.—Also a river of the state of Louisiana, which has its source near the Mississippi, and flowing between that river and the Amite, discharges itself into Lake Maurepas.—Also a village of Ascension parish, in the state of Louisiana, 83 m. WNW of New Orleans.

NEW ROCHELLE, a township of Westchester co., in the state and 18 m. NE of New York, U. S. It has an undulating surface, and is bounded on the S by Long Island sound. The soil is chiefly clay loam. Pop. in 1840, 1,816. It has a village pleasantly situated on a bay of Long Island sound, and containing 800 inhabitants.

NEW ROCHESTER, a village of Freedom township, Wood co., in the state of Ohio, U. S., 108 m. NW of Columbus.

NEW ROSS, a village of Montgomery co., in the state of Indiana, U. S., 35 m. WNW of Indianapolis.

NEW RUMLEY, a village of Rumley township, Harrison co., in the state of Ohio, U. S., 116 m. E by N of Columbus. Pop. in 1840, 200.

NEWRY, a river, chiefly of co. Down, which rises near Rathfriland; runs along the boundary-line between the cos. of Down and Armagh to the town of Newry; and thence, under the name of Narrow-water, flows tidally between co. Down on the l. and the cos. of Armagh and Louth on the r., to the head of the bay or sea-loagh of Carlingford.—Also a navigation, partly natural, but chiefly artificial, connecting the head of Lough Carlingford with the Upper Bann and Lough Neagh in Ulster. The line of artificial navigation, or of strict canal, commences at Fathom $1\frac{1}{2}$ m. below Newry; gains the summit-level immediately N of Poyntz-pass; continues on the summit-level 3 m. to the vicinity of Scarva, and passes alongside Lough Shark, whose surface-elevation is 80 ft. above sea-level; and descends to the Bann, 3 m. above Portadown. The average breadth of the whole canal is 40 ft. at the top.

NEWRY, or ST. MARY'S-OF-NEWRY, a parish, containing a borough of the same name, partly identical with the lordship of the barony of Newry, co. Down, and partly situated in co. Armagh. Pop. in 1831, 25,117; in 1851, 24,809.—The sea-port and parl. borough of N. stands on the Newry river and canal, $5\frac{1}{4}$ m. NNW of Warrenpoint, and 30 m. SSW of Belfast. The older portions of the town were irregularly and inconveniently built on the side of a ridge; but the modern streets, on the low grounds, are comparatively regular, spacious, and well-edified. The houses are nearly all built of granite; and the character of the town as a whole, whether as to street alignment, architecture, or interior appearance, is pleasing. St. Patrick's church, built in 1578, stands upon high ground, on the NE outskirts of the town. St. Mary's church, a handsome edifice of granite, in the pointed style of architecture, is situated on low ground in a central part of the town, on the r. bank of the river. The new Roman Catholic chapel is also a handsome structure, in the modern pointed style; and serves as the cathedral of the Roman Catholic dio. of Droimere. Two of the Presbyterian churches are elegant. There are a spacious assembly-room, a town-hall or market-house, an infantry barrack for the accommodation of 1,100 men, a new court-house, two bridewells in respectively the Down and the Armagh sections of the town, and a fever hospital. The manufactories of N. and the vicinity are cotton mills, linen factories, and yarn factories, along the river; the appliances of an extensive linen-trade; brass and iron foundries, and spade and shovel factories; two breweries and a large distillery, extensive flour mills and oat-meal mills, cordage works, coach and car manufactories, a tobacco-pipe manufactory

and a pottery, and appliances for various departments of manufacture connected with ship-building. Numerous stores situated along the canal impart to the town considerable appearances of a sea-port. The retail-trade is extensive; and the sales of dairy and agricultural produce in the town are large, and command supplies from some districts of Monaghan and Louth, and from all the S parts of Down and Armagh. The sales of butter exceed those of Belfast, and amount to upwards of 3,300 tons a-year. In 1835, the exports amounted, in estimated value, to £616,836. Their chief items were 24,867 tons of corn, meal, and flour; 1,061 tons of provisions; 267 tons of potatoes; 1,297 tons of flax and tow; 5,300 gallons of spirits; 3,686,250 yards of linen, 79 tons and 18 cwt. of eggs, 3,551 cows and oxen, 898 horses, and 15,525 pigs. In the same year the imports amounted in estimated value to £668,711. In 1836 the gross receipts at the custom-house was upwards of £58,806; in 1843, £38,577; in 1849-50, £35,106. The chief trade of the port is with Liverpool and Glasgow; but a considerable trade is also conducted with other ports of Great Britain, with the United States, with British America, with the Mediterranean, with Odessa, with the Baltic, and with Archangel. Steam-vessels are regularly employed in the trade with Great Britain, but come no nearer N. than to Warrenpoint; the large-class merchant vessels also at present come only to Warrenpoint; smaller sea-borne vessels come up Narrow-water and its canal-continuation to Newry; and barges ply up the canal to the Lower Bann and Lough Neagh. The vessels registered at the port in Dec. 1843 were 159 sailing vessels, each under 50 tons; 47 vessels, each above 50 tons; and 2 steam vessels, of jointly 826 tons. In 1850 the registered tonnage of sailing vessels was 8,965 tons; of steamers, 603 tons. During the year 1843, the number of sailing vessels inwards coastwise was 1,265 = 63,854 tons; in 1850, 824 = 48,447 tons. The number of steam vessels inwards coastwise in 1843 was 155 = 28,074 tons; and in 1850, 183 = 47,230 tons. In 1843, the number of sailing vessels inwards from the colonies was 43 = 6,945 tons; in 1850, 7 = 3,610 tons. A line of railway connects the northern terminus of the Dublin and Drogheda railway, by way of Dundalk and N., with the Ulster railway, in the vicinity of Portadown; and a branch line runs from N. to the head of Carlingford lough. The borough sent 2 members to the imperial parliament; it now sends one. Constituency in 1842, 1,136. Area of the Down section of the town, 295 acres; of the Armagh section, 334 acres. Pop. of the whole in 1831, 13,065; in 1851, 13,473.—During the rebellion of 1641, the town suffered severely; and in 1681 it was burned and dreadfully damaged by the army of James II., under the duke of Berwick, to secure their retreat to Dundalk from the forces of William III., under the duke of Schomberg. It gives the title of Viscount to the Earl of Kilmorey.

NEWRY, a township of Oxford co., in the state of Maine, U. S., 64 m. W of Augusta, watered by Bear river and another branch of Androscoggin river. Pop. in 1840, 463.—Also a village of Frankstown township, Huntingdon co., in the state of Pennsylvania, 122 m. W of Harrisburg, on Poplar run, a tributary of the Frankstown branch of Juniata river. Pop. 300.

NEW SALEM, a township of Franklin co., in the state of Massachusetts, U. S., 73 m. WNW of Boston, bordered on the N by Miller's river, and watered by a branch of that river and by an arm of Middle river. The surface is elevated, and the soil is chiefly in pasture. Pop. in 1840, 1,305.—Also a village of New Scotland township, Albany co., in the state of New York, 12 m. W of Albany. It contained in

1840 about 15 dwellings.—Also a village of Salem township, Fayette co., in the state of Pennsylvania, 187 m. W by S of Harrisburg. It contained in 1840 about 25 dwellings.

NEW SCOTLAND, a township of Albany co., in the state of New York, U. S., 9 m. W of Albany. The surface is hilly, and is drained by Coeyman's creek, and a branch of Normanskill river. The soil consists of sand, loam, and clay. Pop. in 1840, 2,912. It has a village containing about 125 inhabitants.

NEW SEWICKLY, a township of Beaver co., in the state of Pennsylvania, U. S., 5 m. E of Beaver. It has a hilly surface, and is watered by Big Beaver river. The soil is chiefly loam. Pop. in 1840, 1,740.

NEWSHAM, a township in Kirkham p., Lancashire, 9 m. NNE of Preston.—Also a township in Kirby-Wisk p., Yorkshire, 4 m. W by N of Thirsk, on the E bank of the Swale. Area 1,869 acres. Pop. in 1831, 182; in 1851, 191.—Also a township in Kirby-Ravensworth p., Yorkshire, 8½ m. NW of Richmond. Area 3,312 acres. Pop. in 1831, 546; in 1851, 434.—Also a township in Wressell p., Yorkshire, 1½ m. NW of Howden, crossed by the Selby and Hull railway. Area 2,400 acres. Pop. 138.

NEW SHARON, a township of Franklin co., in the state of Maine, U. S., 28 m. NW of Augusta. It is drained by Sandy river, an affluent of Kennebec river, and is generally fertile. Pop. in 1840, 1,829.

NEW SHOREHAM, a township of Newport co., in the state of Rhode Island, U. S., 15 m. SSW of Point Judith, and 13 m. NE of Montank point, Long island. It comprises Block island. The inhabitants, who in 1840 were about 1,069 in number, are mostly engaged in fishery.

NEW SIBERIA. See **SIBERIA (NEW)**.

NEWSON'S DEPOT, a village of Southampton co., in the state of Virginia, U. S., 78 m. SSE of Richmond, on the Portsmouth and Roanoke railroad.

NEW SOUTH SHETLAND, a name given by some navigators to an imperfectly explored archipelago and portion of the great Antarctic continent, situated about 600 m. S. of Cape Horn, between the parallels of 61° and 64° 30' S, and the meridians of 53° and 62° E. The islands, of which the principal are Clarence, Cornwallis, Elephant, Livingston, Deception, and Smith, are all lofty and apparently of volcanic origin. They are separated from that portion of the mainland on which D'Urville bestowed the name of Joinville Land, and Louis Phillippe Land, by a wide channel called Bransfield strait. Cook, Weddel, Biscoe, D'Urville, Wilkes and Ross, have successively visited and described these islands.

NEW SOUTH WALES, the parent-colony of Australia, so called by Cook, on account of a certain resemblance which he saw or fancied to exist between the scenery of Botany Bay and that with which he had been familiar in the southern counties of Wales. On the 21st of August 1770, having landed on Possession island, in S lat. 10° 30', he took formal possession of all the E coast of Australia in these words: "As I am now about to quit the E coast of New Holland, which I have coasted from lat. 38° to this place; and which I am confident no European has ever seen before, I once more hoist English colours, and though I have already taken possession of several parts, I now take possession of the whole eastern coast, by the name of New South Wales—from its great similarity to that part of the principality of Wales—in right of my sovereign, George the Third, King of Great Britain." In our general article on **AUSTRALIA**, a section has been devoted to general details respecting each division of the island under the head **EASTERN AUSTRALIA**; and further information will be found under the heads **MEL-**

BOURNE, MORETON BAY, PORT JACKSON, PORT PHILLIP AND SYDNEY.

NEWSTEAD, a township of Erie co., in the state of New York, U. S., 20 m. NE of Buffalo. It has an undulating surface, and is drained by Ellicott's creek and tributaries of Tonawanda creek. The soil consists chiefly of clay and gravelly and calcareous loam. Pop. in 1840, 2,653.

NEWSTEAD, a township in Bambrugh parish, Northumberland, 5 m. SSE of Belford. Pop. in 1851, 139.—Also a liberty in Papplewick p., Nottinghamshire, 5 m. S of Mansfield. Pop. in 1831, 159; in 1851, 155. An abbey, founded here by Henry II. about 1170, was at the dissolution granted to Sir J. Byron, ancestor of the late Lord Byron. The great poet fitted up a part of the ancient edifice as a family mansion; but his patrimonial domain has passed into other hands.—Also a village in the p. and 1 m. E of Melrose in Roxburghshire. Pop. 250.

NEW SWEDEN, a village of Au Sable township, Clinton co., in the state of New York, U. S., 155 m. N of Albany, on the N side of Au Sable river. Pop. in 1840, 250.

NEWTEE, a fortress of Hindostan, in the presidency of Bombay and prov. of Bejapur, on a point of land which advances into the sea of Oman, and about 45 m. NW of Goa.

NEWTORPE, a township in Sherburn p., Yorkshire, 104 m. E by S of Leeds, crossed by the Leeds and Selby railway. Area 708 acres. Pop. 77.

NEW-TIMBER, a parish in Sussex, 6 m. N by W of Brighton. Area 1,693 acres. Pop. 161.

NEWTON, a parish in Cambridgeshire, 6 m. S by W of Cambridge. Area 984 acres. Pop. in 1831, 161; in 1851, 185.—Also a township in West Kirby p., Cheshire, 8 m. NNW of Great Neston. Area 340 acres.—Also a township in Middlewich p., Cheshire, 3 m. S of Middlewich, intersected by the Trent and Mersey canal. Area 610 acres. Pop. in 1831, 1,649; in 1851, 1,500.—Also a township in Malpas p., Cheshire, 1½ m. SW by W of Malpas.—Also a township in St. Oswald p., Cheshire, 1½ m. NNE of Chester.—Also a township in Runcorn p., Cheshire, 5 m. NE by E of Frodsham. Area 1,120 acres.—Also a township in Tattenhall p., Cheshire, 3½ m. WSW of Tarporley. Area 621 acres.—Also a township in Clodock p., Herefordshire, 9 m. SE of Hay. Pop. in 1831, 253; in 1851, 233.—Also a township in Croft p., Herefordshire, 5½ m. NW by N of Leominster. Area 970 acres. Pop. in 1831, 95; in 1851, 111.—Also a township in Kirkham p., Lancashire, 2 m. SE by E of Kirkham, in the line of the Preston and Wyre railway. Area 1,525 acres. Pop. in 1831, 381; in 1851, 299.—Also a chapelry and township in the p. and within the par. boundaries of Manchester, Lancashire, 2½ m. NE of Manchester, in the line of the Rochester canal, and of the Manchester and Leeds railway. Area 1,585 acres. Pop. in 1831, 4,377; in 1851, 10,801. Calico-printing, and the manufacture of cotton and silk, are carried on here to a considerable extent; and chemical works for the manufacture of alkali cover a surface of 20,000 sq. yds., and employ 300 hands. A chimney of these works, erected at a cost of £7,000, is 25 ft. higher than St. Paul's cathedral; being upwards of 132 yds. in height.—Also a parish in Lincolnshire, 2 m. NW by N of Folkenham. Area 1,220 acres. Pop. in 1831, 176; in 1851, 220.—Also a hamlet in the p. of Clifton-upon-Dunsmoor, Warwickshire, 2½ m. NE of Rugby.—Also a parish in Northamptonshire, 3½ m. N by E of Kettering. Area 1,050 acres. Pop. in 1831, 111; in 1851, 85.—Also a township in Bywell-St. Peter p., Northumberland, 6 m. E of Hexham.—Also a parish in Suffolk, 3 m. E by S of Sudbury. Area 2,197

acres. Pop. in 1831, 432; in 1851, 499.—Also a parish in Suffolk, 2½ m. SSE of St. Edmundsbury. Area 1,157 acres. Pop. in 1831, 137; in 1851, 187.—Also a parish in the N. R. of Yorkshire, 3 m. SW by W of Guisborough. Area 1,440 acres. Pop. in 1831, 148; in 1851, 127.—Also a township in the p. of Mottram, in Cheshire, 5½ m. NE of Stockport, on the Manchester and Sheffield railway. Area 868 acres. Pop. in 1831, 5,997; in 1851, 7,481, chiefly employed in the manufactures connected with Mottram.—Also a township in Pickering p., Yorkshire, 4 m. N by E of Pickering. Pop. in 1831, 211; in 1851, 252.—Also a parish of Mid-Lothian, 3 m. E of Edinburgh. Area 1,256 acres. Pop. in 1851, 1,780, mostly colliers.—Also the name of many villages and hamlets throughout England and Scotland, hardly one of which is of sufficient importance to require separate notice.

NEWTON, a township of Lower Canada, in the co. of Vaudreuil. The soil is generally good, especially in its W part. Pop. about 48.

NEWTON, a central county of the state of Georgia, U. S., comprising an area of 460 sq. m., drained by Yellow and Alcopahatchee rivers, branches of Ocmulgee river by which it is bordered on the S. Pop. in 1840, 11,628, of whom 3,720 were slaves; in 1850, 13,296. Its cap. is Covington.—Also a central county of the state of Mississippi, containing a superficies of 540 sq. m., drained by head branches of Chickasawha river. Pop. in 1840, 2,527, of whom 546 were slaves; in 1850, 4,456. Its cap. is Decatur.—Also a county in the SW corner of the state of Missouri, containing a surface of 1,150 sq. m., drained by branches of Neosho river. Pop. in 1840, 3,790, of whom 169 were slaves; in 1850, 4,270. Its cap. is Neosho.—Also a township of Middlesex co., in the state of Massachusetts, 7 m. W. of Boston, enclosed on 3 sides by a curve of Charles river, and intersected by the Boston and Worcester railroad. Pop. in 1840, 3,351. The village contains about 50 dwellings.—Also a township of Sussex co., in the state of New Jersey, 70 m. N of Trenton. Its central part is level, and is watered by the Paulinskill. Pop. 3,857. The village stands on the Paulinskill, and contains about 900 inhabitants.—Also a township of Gloucester co., in the same state, 6 m. NE of Woodbury. The surface is level, and is watered by Cooper's and Newton's creeks. The soil is sandy and is chiefly devoted to the culture of vegetables. Pop. 1,863.—Also a township of Cumberland co., in the state of Pennsylvania, 16 m. W of Carlisle. It has a level surface bordered on the W by Big Pond, and intersected by its outlet Yellow Breeches creek. Pop. 1,499.—Also a township of Delaware co., in the same state, 14 m. NW of Pennsylvania. The surface is hilly, and is watered by Crum and Darby creeks. The soil is chiefly loam. Pop. 752.—Also a township of Miami co., in the state of Ohio. Pop. 1,242.—Also a township of Muskingum co., in the same state, 60 m. E of Columbus. Pop. 2,568.—Also a township of Licking co., in the same state. Pop. 1,247.—Also a township of Pike co., in the same state. Pop. 326.—Also a township of Calhoun co., in the state of Michigan, 114 m. W of Detroit. Pop. 235.—Also a village of Jasper co., in the state of Illinois, 130 m. SE of Springfield, on the W side of Embarras river. Pop. 150.

NEWTON, OR CLARKE, a village of Canada West, in the township of Clarke, 12 m. from Port Hope. Pop. 130.

NEWTON-ABBOT, a chapelry and market-town, in Woodborough p., Devonshire, 14 m. SSW of Exeter, on the river Teign. It is united to Newton Bushell, and constitutes with it one town, which is

increasing in importance; its trade being facilitated by means of a railway and canal communicating with the river Teign. It is one of the polling-stations for the county.

NEWTON-BAY, an inlet on the N coast of the Middle island of New Zealand, in Queen Charlotte's sound. See article NEW ZEALAND.

NEWTON-BLOSSOMVILLE, a parish in Bucks, $2\frac{1}{2}$ m. E of Olney, on the S bank of the Ouse. Area 1,050 acres. Pop. in 1831, 237; in 1851, 332.

NEWTON-IN-BOWLAND, a township in Slaidburn p., Yorkshire, 6 m. NNW of Clitheroe, on the river Hodder. Area 6,556 acres. Pop. in 1851, 449.

NEWTON-BROMSHOLD, a parish in Northamptonshire, 3 m. SE of Higham-Ferrers. Area 1,740 acres. Pop. in 1831, 122; in 1851, 178.

NEWTON-CAPP, a township in St. Andrew-Auckland p., Durham, a $\frac{1}{2}$ m. NW of Bishop-Auckland. Area 939 acres. Pop. in 1851, 280.

NEWTON CENTRE, a village of Newton township, Middlesex co., in the state of Massachusetts, U. S., 7 m. W of Boston.

NEWTON-COLD, a township in Lowesby p., Leicestershire, $8\frac{1}{2}$ m. E by N of Leicester. Pop. in 1831, 120; in 1851, 111.

NEWTON-ST.-CYRES, a parish in Devonshire, $3\frac{1}{2}$ m. ESE of Crediton, on the SW bank of the Creed. Area 4,305 acres. Pop. in 1851, 144.

NEWTON-UPON-DERWENT, a township in Wilberfoss p., Yorkshire, $5\frac{1}{2}$ m. W of Pocklington. Area 1,640 acres. Pop. in 1831, 228; in 1851, 235.

NEWTON FALLS, a village of Newton township, Trumbull co., in the state of Ohio, U. S., 162 m. NE of Columbus, on the Pennsylvania and Ohio canal, at the junction of two branches of Mahoning river. Pop. in 1840, 450.

NEWTON LOWER FALLS, a village of Newton township, Middlesex co., in the state of Massachusetts, U. S., 11 m. W of Boston, chiefly on the E side of Charles river.

NEWTON UPPER FALLS, a village of Newton township, Middlesex co., in the state of Massachusetts, U. S., 9 m. W of Boston, on the E side of Charles river.

NEWTON-FERRERS, a parish in Devonshire, $6\frac{1}{2}$ m. SE of Plymouth, on the E bank of the Yealm. Area 3,191 acres. Pop. in 1831, 767; in 1851, 743.

NEWTON-FLOTMAN, a parish in Norfolk, $7\frac{1}{2}$ m. S by W of Norwich, in the line of the London and Norwich railway. Area 1,173 acres. Pop. in 1831, 282; in 1851, 359.

NEWTON-HARCOURT, a township in Wistow p., Leicestershire, $6\frac{1}{2}$ m. SE by S of Leicester, on the river Soar. Area 880 acres. Pop. in 1831, 279; in 1851, 244.

NEWTON-IN-THE-ISLE, a parish in the isle of Ely, Cambridgeshire, 4 m. NW of Wisbeach, on the Wisbeach or Nene river. Area 3,056 acres. Pop. in 1831, 431; in 1851, 450.

NEWTON-KYME, a parish in the W. R. of Yorkshire, 2 m. NW of Tadcaster, on the S bank of the Warfe. Area 1,050 acres. Pop. in 1851, 223.

NEWTON-ST.-LOE, a parish in Somersetshire, $3\frac{1}{2}$ m. W of Bath, in the line of the Great Western railway. Area 1,578 acres. Pop. in 1851, 440.

NEWTON (Loxo), a parish in the co. palatine of Durham, 4 m. WSW of Stockton-upon-Tees. Area 4,544 acres. Pop. in 1831, 313; in 1851, 325.

NEWTON-LONGVILLE, a parish in Bucks, 3 m. SW of Penny-Stratford. Area 1,718 acres. Pop. in 1831, 473; in 1851, 595.

NEWTON-IN-MAKERFIELD, a borough and chapelry in Winwick p., co. palatine of Lancaster, 47 m. SE of Lancaster, intersected by the Warrington and Wigan railway, and by the Manchester and

Liverpool line. It formerly returned two members to parliament, but was disfranchised by the Reform bill. Area 2,692 acres. Pop. in 1831, 2,139; in 1851, 3,719.

NEWTON-ON-THE-MOOR, a township in Shilbottle p., Northumberland, 5 m. S by W of Alnwick. Pop. in 1831, 265; in 1851, 290.

NEWTON-MULGRAVE, a township in Lythe p., Yorkshire, 8 m. NW by W of Whitby. Area 2,196 acres. Pop. in 1831, 123; in 1851, 103.

NEWTON (North), a parish in Wiltshire, $8\frac{1}{2}$ m. SE by E of Devizes, on a branch of the Avon. Area 1,381 acres. Pop. in 1801, including the tything of Hillecott, 221; in 1831, 317; in 1851, 364.

—Also a chapelry in North Petherton p., Somersetshire, $3\frac{1}{2}$ m. SE of Bridgewater, crossed by the Taunton and Bridgewater canal, and in the line of the Bristol and Exeter railway.—Also a parish in Pembrokehire, 3 m. WSW of Narberth.

NEWTON-NOTTAGE, a parish in Glamorgan-shire, 5 m. WSW of Bridgend, intersected by the Duffryn-Llynvi and Port-Cawl railway. Pop. 959.

NEWTON (Old), a parish in Suffolk, $2\frac{1}{2}$ m. N by E of Market-Stow. Area 2,348 acres. Pop. in 1831, 679; in 1851, 792.

NEWTON-UPON-OUZE, a parish in the N. R. of Yorkshire, $8\frac{1}{2}$ m. NW of York, comprising the townships of Benningbrough, Linton-upon-Ouze, and N. Area 4,590 acres. Pop. in 1851, 947.

NEWTON-ST.-PETROCK, a parish in Devonshire, $7\frac{1}{2}$ m. SW of Great Torrington, on the banks of the Torridge. Area 1,556 acres. Pop. in 1831, 250; in 1851, 272.

NEWTON-POPPLEFORD, a chapelry in Aylesbear p., Devonshire, 3 m. NW by W of Sidmouth, on the W bank of the Otter, over which an iron bridge of 3 arches, each 30 ft. span, has been erected here. Pop. in 1831, 588; in 1851, 526.

NEWTON-POTTER, a township in the p. of St. Peter, Yorkshire, 2 m. NNE of Leeds. Area 1,657 acres. Pop. in 1831, 863; in 1851, 1,385.

NEWTON-PURCELL, a parish in Oxfordshire, $6\frac{1}{2}$ m. NE by N of Bicester. Area 593 acres. Pop. in 1831, 131; in 1851, 117.

NEWTON-REGIS, a parish in Warwickshire, $5\frac{1}{2}$ m. NE by E of Tamworth. Area 1,610 acres. Pop. in 1831, 383; in 1851, 487.

NEWTON-RIGNY, a parish in Cumberland, 3 m. WNW of Penrith. Area 2,414 acres. Pop. in 1831, 176; in 1851, 304.

NEWTON-BY-SEA, a township in Embleton p., Northumberland, 8 m. NE by N of Alnwick. Pop. in 1831, 271; in 1851, 274.

NEWTON-SHAU, a thriving village in the p. and shire of Clackmannan, $1\frac{1}{2}$ m. S of the river Devon, and $1\frac{1}{2}$ m. N of Alloa. Pop. 798.

NEWTON-SOLNEY, a parish in Derbyshire, 8 m. SW by S of Derby, on the E bank of the Trent. Area 1,280 acres. Pop. in 1831, 338; in 1851, 366.

NEWTON (South), a parish in Wilts, $2\frac{1}{2}$ m. N by W of Wilton, on the E bank of the Wiley river, comprising the chapelry of Chilhampton and Ugford, and the tythings of Burden's-Ball, Stowford, and Wishford. Area 3,370 acres. Pop. in 1851, 706.

NEWTON-STEWART, or **NEWTON-DOUGLAS**, a town chiefly in the p. of Penninghame, Wigtonshire, but partly in that of Minigaff, Kirkcudbrightshire, 8 m. N of Wigton. Tanning and currying of leather, and weaving of cotton, employ a considerable number of hands in this town; but the purchasing of wool for the markets of Lancashire is the staple trade. The business done at the cattle and horse markets held here is great and increasing. Sea-communication is maintained from a harbour at Carty, about $1\frac{1}{2}$ m. down the river. The pop. in 1831 was 2,241; in 1841, 2,172; in 1851, 2,599.

NEWTON-BY-TOFT, a parish in Lincolnshire, 4 m. W by S of Market Rasen. Area 1,004 acres. Pop. in 1831, 82; in 1851, 71.

NEWTON-TONEY, a parish in Wiltshire, 4 m. E by S of Amesbury, on a branch of the Avon. Area 2,365 acres. Pop. in 1851, 316.

NEWTON-TRACEY, a parish in Devonshire, 5 m. E by N of Bideford, on the river Taw. Area 336 acres. Pop. in 1831, 111; in 1851, 143.

NEWTON-ON-TRENT, a parish in Lincolnshire, 10 m. WNW of Lincoln. Area 1,390 acres. Pop. in 1831, 310; in 1851, 366.

NEWTON-UPON-AYR, a small parish on the coast of Kyle, Ayrshire. Pop. in 1801, 1,724; in 1831, 4,020; in 1851, 4,814.—The burgh of N., a suburb of the royal burgh of Ayr, presses on one side on the r. bank of the river Ayr, and on another on the frith of Clyde, and lies compactly on a third side with Wallace-town, a conjoint suburb. It was for a long time dependent chiefly on the collieries, but has sprung into new energy under the influence of trade and manufacture. Ship-building, rope and sail-making, iron-foundries, and salt-pans, supply employment; and about 400 weavers, and upwards of 600 hand-sewers, work for the warehouses of Glasgow. N. possesses a joint interest with Ayr in the harbour of that town; has a railway to it from the coal-mines in the p. of St. Quivox; and exports nearly all the coals, the traffic in which constitutes the chief part of the harbour's trade. Pop. of borough in 1851, 4,814.

NEWTON-VALENCE, a parish in Hants, 4 m. S of Alton. Area 2,253 acres. Pop. in 1851, 355.

NEWTON-WATER, a parish in Huntingdonshire, 5½ m. NNW of Stilton. Area 863 acres. Pop. in 1831, 108; in 1851, 133.

NEWTON-WELSH, a parish in Monmouthshire, 3½ m. NW of Monmouth. Area 1,821 acres. Pop. in 1831, 224; in 1851, 248.

NEWTON (WEST), a township in Broomfield p., Cumberland, 8½ m. N of Cockermouth, in the line of the Maryport and Carlisle railway. Pop. in 1831, 322; in 1851, 347.

NEWTON (WEST), a parish in Norfolk, 2½ m. NE by N of Castle-Rising. Area 1,230 acres. Pop. in 1831, 232; in 1851, 227.—Also a township in Kirk-Newton p., Northumberland, 6 m. WNW of Wooler.—Also a township in Aldbrough p., Yorkshire, 8½ m. NE of Kingston-upon-Hull.

NEWTON-LE-WILLOWS, a township in the p. of Patrick-Brompton, Yorkshire, 4 m. WNW of Bedale, on a branch of the Swale. Area 1,797 acres. Pop. in 1831, 269; in 1851, 355.

NEWTON-ON-THE-WOLDS, a parish in Lincolnshire, 8½ m. SSW of Great Grimsby. Area 2,060 acres. Pop. in 1831, 158; in 1851, 179.

NEWTON-WOOD, a parish in Northamptonshire, 4 m. N by W of Oundle. Area 1,590 acres. Pop. in 1831, 449; in 1851, 501.

NEWTOWN, a township in Irthington p., Cumberland, 4½ m. NNW of Carlisle. Pop. in 1831, 215; in 1851, 212.—Also a parish and market-town in Montgomeryshire, 8 m. SW of Montgomery, intersected by the Montgomeryshire canal, and situated in a fertile valley, on the banks of the Severn, over which there is here a bridge of 3 arches. Pop. in 1831, 4,550; in 1851, 3,784. The town has been considerably extended of late years, and possesses some good houses. The new flannel-hall is a spacious and handsome edifice. The staple manufacture of N. is that of flannel. There are several fulling-mills and bleaching-grounds, besides potteries, tanyards, and malt-kilns, in the town and its vicinity. By the reform act, N. was added as a contributory borough to Montgomery. The borough

comprehends the p. of N., and the townships of Hendidley and Gwestydd in the p. of Llanllwchaearn. Pop. in 1851, 6,371.—Also a township in Chillingham p., Northumberland, 3½ m. ESE of Wooler.—Also a chapelry in Wem p., Shropshire, 12 m. N by W of Shrewsbury.—Also a parish in the co. of Southampton, 10 m. N by E of Whitechurch, on the S bank of the Emborne. Area 475 acres. Pop. in 1831, 269; in 1851, 262.—Also a disfranchised borough and chapelry in Calbourne p., in the isle of Wight, 5 m. W by N of Newport. Until disfranchised by the reform act, with a pop. of 86 in 1851, N. returned 2 members to parliament!

NEWTOWN, a village in the parish of Shandrum, co. Cork, 4 m. W of Charleville. Pop. in 1831, 175; in 1851, 242.—Also a village in the p. of Abbeyknockmoy, co. Galway. Pop. in 1851, 61.—Also a village in the parish of Lussnagh, King's co., 2½ m. S by W of Banagher. Pop. in 1831, 348; in 1851, 111.—Also a parish in co. Meath, 2½ m. N of Kells. Area 1,103 acres. Pop. in 1831, 217; in 1851, 137.—Also a village in the p. of Rossmore, co. Waterford, 2 m. NE by E of Kilmacthomas.—Also a village in co. Dublin, on a head-stream of the Dodder, 2 m. S by W of Rathfarnham.—Also a hamlet in co. Galway, 5½ m. NNE of Gort.—Also a parish in co. Westmeath, containing part of the town of Tyrrel's-pass, and the villages of Ballinagore, Killavally, and Newton-Loe. Area 10,247 acres. Pop. in 1831, 2,752; in 1851, 2,469.

NEWTOWN, a village of New South Wales, in the co. of Cumberland, and p. of Petersham, about 3 m. from Sydney. Pop. 1,215.—Also a village of Tasmania, in the co. of Buckingham, and p. of Hobart-Town, on the Derwent, 3 m. from Hobart.

NEWTOWN, a township of Rockingham co., in the state of New Hampshire, U. S., 30 m. SE of Concord, bordered on the NW by a large pond, and generally fertile. Pop. in 1840, 541.—Also a township of Fairfield co., in the state of Connecticut, 62 m. SW of Hartford. The surface is elevated, and is watered by Polatuck river, a branch of the Housatonic. The soil consists of gravelly loam, and is generally fertile. Pop. in 1840, 3,189.—Also a township of Queen's co., in the state of New York, 152 m. S of Albany. It is bounded on the N by East river and Long Island sound, and is drained by Newton creek. In some parts it is hilly and stony, but its soil, consisting chiefly of sand and clay loam, is generally well-cultivated. Pop. 5,054. The village contained, at the same period, about 500 inhabitants.—Also a township of Bucks co., in the state of Pennsylvania, 20 m. NE of Philadelphia. It has a level surface, and is drained by Newton creek, a branch of Neshaminy creek. Pop. 1,414. The town is on N. Creek, and contains about 100 inhabitants.—Also a township of Delaware co., in the state of Pennsylvania, 14 m. NW of Philadelphia. It has a hilly surface, and is drained by Crum and Darby creeks. The soil is chiefly loam. Pop. 752.—Also a village of King and Queen co., in the state of Virginia, 38 m. ENE of Richmond, 3 m. N of Mattapony river. Pop. 100.—Also a village of Anderson township, Hamilton co., in the state of Ohio, 119 m. SW by W of Columbus, on the E side of Little Miami river, and consisting in 1840 of about 30 dwellings.—Also a creek which has its source in Newtown township, Queen's co., in the state of New York, and flows into East river, opposite New York.

NEWTOWN-ANDERSON, a village in the p. of Calry, co. Sligo, 1½ m. E of Sligo.

NEWTOWN-ARDES, a parish in co. Down, containing the town of N. Area 14,802 acres. Pop. in 1831, 9,981; in 1851, 15,482. The S boundary, to the extent of 3½ m., is identical with the extreme

N shore of Lough Strangford.—The town of N., formerly a parl. borough, stands on the road from Bangor to Downpatrick, $3\frac{1}{2}$ m. NNE of Comber, and 8 m. E of Belfast. It is one of the few first-class towns of co. Down, as to size and importance; and one of the most attractive towns of the N of Ireland, as to neatness, regularity, architecture, and convenience. The weaving of muslin employs a large number of the male pop.; and the embroidering of muslin, for the manufacturers of Glasgow, employs many of the female pop. The town has a large brewery; and conducts an extensive retail trade. Pop. in 1831, 4,442; in 1851, 10,075.

NEWTOWN-BARRY, a parish of co. Wexford, containing the town of N. Area 8,248 acres. Pop. in 1831, 1,592; in 1851, 3,123. On its S boundary rises Blackrock mountain, whose alt. above sea-level is 1,071 ft., and at its SW extremity Mount Leinster, whose alt. above sea-level is 2,610 ft.—The town stands on the NW verge of the co., at the confluence of the Clady with the Slaney, $6\frac{1}{2}$ m. NW of Ferns. It is built in the form of an irregular square, and possesses a character of neatness. Pop. in 1831, 1,430; in 1851, 1,307.

NEWTOWN-BELLEW, a village in the p. of Moylough, co. Galway, 3 m. WNW of Mount-Bellew. Pop. in 1831, 246.—Also one of three denominations of a series of bogs, from 1 m. to 4 m. N of the v. of N. The other denominations are New-Forest and Gartnadeeve. Area of the whole, 11,063 acres.

NEWTOWN-BREDA, a village in the p. of Knockbreda, co. Down, 3 m. S by E of Belfast. Pop. in 1851, 354.

NEWTOWN-BUTLER, a village in the p. of Galloon, co. Fermanagh, $13\frac{1}{2}$ m. SE by S of Enniskillen. It gives the title of Baron to the earls of Lanesborough. Pop. in 1831, 412; in 1851, 477.—Also a village in the p. of Oranmore, co. Galway. Pop. in 1851, 150.

NEWTOWN-CLONBUN, a parish in co. Meath, 1 m. E of Trim. Area 566 acres. Pop. in 1851, 227.

NEWTOWN-CONYNGHAM, a village in the p. of All-Saints, co. Donegal, $6\frac{1}{2}$ m. W of Londonderry. Pop. in 1851, 164.

NEWTOWN-CROMMOLIN, a parish, containing a v. of the same name, 3 m. NE by E of Clough, in co. Antrim. Area 3,445 acres. Pop. in 1831, 727; in 1851, 876. Pop. of the v. in 1851, 142.

NEWTOWN-FORBES, a post-town in the p. of Clongesh, co. Longford, $2\frac{1}{2}$ m. NNW of Longford. Pop. in 1831, 537; in 1851, 331.

NEWTOWN-FORTESCUE, a village in the p. of Grangegeeth, co. Meath, $3\frac{1}{2}$ m. N of Slane.

NEWTOWN-GIRLEY, a village in the p. of Girley, co. Meath, 3 m. N of Athboy.

NEWTOWN-GORE, a village in the p. of Carrigallen, co. Leitrim, 5 m. ESE of Ballinamore. Pop. in 1831, 207; in 1851, 193.

NEWTOWN-HAMILTON, a parish, containing a town of the same name, in co. Armagh. Area 12,404 acres. Pop. in 1831, 7,253; in 1851, 6,285. The County-water runs on the W boundary; and the Newtown-Hamilton river, a head-stream of the Castletown, drains most of the interior. The highest ground, Dangry mountain, situated a little NW of the town, has an alt. of 1,093 ft. above sea-level.—The town of N. stands on the middle road from Armagh to Dublin, $4\frac{1}{2}$ m. SW of Mount-Norris. Pop. in 1831, 1,020; in 1851, 1,219.

NEWTOWN-LENNAN, a parish in co. Tipperary, $3\frac{1}{2}$ m. N by E of Carrick-on-Suir. Area 5,774 acres. Pop. in 1831, 1,931; in 1851, 1,428.

NEWTOWN-LIMAVADDY, a market-town in the p. of Drumachose, co. Londonderry, on the r.

bank of the river Roe, 2 m. E by S of the SE extremity of Lough Foyle, and $7\frac{1}{2}$ m. N of Dungiven. The church is a handsome structure; the private houses, though including a number of cabins, and of large but poor tenements, are aggregately much better than those of most second-rate towns in County. The linen trade of N. was at one time of considerable extent, and it gives promise of reacquiring its former importance. The great impulse given for some time past to the agriculture of the surrounding country, has occasioned a steady increase to the prosperity of the town. Pop. in 1831, 2,428; in 1851, 3,206.

NEWTOWN-LINFORD, a parish in Leicestershire, $5\frac{1}{2}$ m. NW of Leicester, on a branch of the Soar. Pop. in 1831, 449; in 1851, 489.

NEWTOWN-LOE, a village in the p. of Newtown, co. Westmeath, $2\frac{1}{2}$ m. W by S of Tyrrel's-Pass.

NEWTOWN-MOUNT-KENNEDY, a small town in the p. of Upper Newcastle, co. Wicklow, $17\frac{1}{2}$ m. SE of Dublin. Pop. in 1831, 825; in 1851, 717.

NEWTOWN-PLATTEN, a village in the p. of Duleek, co. Meath, 2 m. SW of Drogheda.

NEWTOWN-SANDES, a village in the p. of Murhir, co. Kerry, $4\frac{1}{2}$ m. S of Tarbert. Pop. 275.

NEWTOWN-SQUARE, a village of Delaware co., in the state of Pennsylvania, U. S., 90 m. ESE of Harrisburg, containing in 1840 about half a dozen dwellings.

NEWTOWN-STALABAN, a village in the p. of Tullvallen, co. Louth, $1\frac{1}{2}$ m. NE of Drogheda.

NEWTOWN-STEPHENSBURG, a village of Frederick co., in the state of Virginia, U. S., 154 m. NNW of Richmond. Pop. in 1840, about 700.

NEWTOWN-STEWART, a town in the p. of Ardstraw, co. Londonderry, on the river Mourne, 5 m. W of Gorton. N. was originally called Lislas; it acquired its present name from Sir William Stewart, to whom it was granted by Charles I. In consequence of its commanding a great pass from the valley of the Foyle, and the N sea-board of Donegal and Londonderry to the centre and the S of the kingdom, it was long an important military post. Pop. in 1831, 1,737; in 1851, 1,402.

NEWTOWN-TRIM, a village in the p. of Newtown-Clonbun, co. Meath, on the l. bank of the Boyne, $\frac{3}{4}$ m. E of Trim.

NEW TRENTON, a village of Whitewater township, Franklin co., in the state of Indiana, U. S., 81 m. ESE of Indianapolis. Pop. in 1840, 250.

NEW TRIPOLI, a village of Linn township, Lehigh co., in the state of Pennsylvania, U. S., 86 m. ENE of Harrisburg, on a branch of Maiden creek.

NEWTYLE, a parish and village at the SW verge of Forfarshire. An opening or pass through the Sidlaw hills, on the SE side of this p., between the hills of N. and Hatton, bears the name of 'the Glack of N.,' and is traversed by the turnpike from Dundee to N. and Meikle, and by the Dundee and N. railway. The v. of N., 11 m. from Dundee, is rapidly rising to the importance of a trafficking town. Standing on the highway between Dundee and Strathmore, and at the terminus of a railway constructed for draining to the great seaport the product of the magnificent strath, and holding communication by railway with Dundee, it is rapidly becoming a depot for grain and other agricultural produce. The inhabitants, however, are almost exclusively weavers of linen fabrics, chiefly sheetings, for the manufacturers of Dundee. Pop. in 1831, 904; in 1851, 1,141.

NEW UTRECHT, a township of King's co., in the state of New York, U. S., 7 m. N of New York. It occupies the W extremity of Long Island, and is separated by the Narrows from Staten island. It is generally level, and has a light sandy soil. Pop. in 1840, 1,283.

NEW VILLAGE, a village of Brookhaven township, Suffolk co., in the state of New York, U. S., 198 m. SSE of Albany.—Also a v. of Greenwich township, Warren co., in the state of New Jersey, 54 m. NNW of Trenton, on the Morris canal. It consisted in 1840 of about a dozen dwellings.

NEWVILLE, a village of Danube township, Herkimer co., in the state of New York, U. S., 66 m. WNW of Albany. Pop. in 1840, 200.—Also a v. of Newton township, Cumberland co., in the state of Pennsylvania, 30 m. SW of Harrisburg, on Big Spring creek. Pop. 654.—Also a v. of Worthington township, Richland co., in the state of Ohio, 74 m. NNE of Columbus, on the N side of Clear fork of Mohican creek. Pop. 250.

NEW VINEYARD, a township of Franklin co., in the state of Maine, U. S., 48 m. NW of Augusta. The surface is hilly, and is watered by a branch of Seven Mile river, and by a branch of Sandy river, both tributaries of Kennebec river. Pop. in 1840, 927.

NEW WILMINGTON, a village of Lakawannock township, Mercer co., in the state of Pennsylvania, U. S., 241 m. WNW of Harrisburg, consisting in 1840 of about 20 dwellings.

NEW WINDSOR, a township of Orange co., in the state of New York, U. S., 86 m. S by W of Albany. It has a hilly surface, and is drained by Murderer's creek, an affluent of Hudson's river, by which the township is bounded on the E. The soil is chiefly loam. Pop. in 1840, 2,482. The v. is on the W side of the Hudson, and contained in 1840 about 250 inhabitants.

NEW WOODSTOCK, a village of Cazenovia township, Madison co., in the state of New York, U. S., 115 m. W by N of Albany. Pop. about 300.

NEW YEAR ISLANDS, a group off the N coast of Staten island, Tierra-del-Fuego, in S lat. 54° 41', W long. 64° 28'. They abound with marine, and other birds, and seals. They were first visited by Cook, on the 31st Dec. 1774, and received from him the name which they bear.

NEW YEAR'S ISLANDS, a group off Arnheim Land, on the N coast of Australia, to the NW of Goulburn islands, in S lat. 11° 55', E long. 133°.

NEW YEAR'S RANGE, a mountain-range in New South Wales, in the district of Wellington, near the Rogan river, in S lat. 30° 20', E long. 146° 53'.

NEW YORK, the most populous as well as the most important and influential of the United States, between N lat. 40° 30' and 45°, and W long. 71° 56' and 79° 56'; bounded on the N by Lake Ontario, the St. Lawrence, and Lower Canada; on the E by Vermont, Massachusetts, and Connecticut; on the S by the Atlantic ocean, New Jersey, and Pennsylvania; and on the NW by Pennsylvania and Lake Erie. Exclusive of Long Island, it is 320 m. long, and 312 m. broad; and contains in the whole 46,085 sq. m., or 29,494,400 acres,—an area nearly equal to that of England and Wales.

Physical features. The SE angle of the state is mountainous, being traversed by several ridges proceeding from New Jersey, one of which crosses the Hudson river at the Highlands, presenting a bold and lofty face along both margins of the river, and abounding in the most magnificent scenery. The Catskill mountains as a range are the most elevated, and have several culminations of considerable size; but the greatest elevation in the state is Mount Marcy, in the Adirondack group, which rises 5,467 ft. above the level of the ocean. The country of Lake Champlain is hilly, and becomes mountainous on approaching the highlands which divide the waters of the lake from those which flow into the St. Lawrence and Lake Ontario. The W part of the state, lying between Lake Ontario and Pennsylvania,

is principally level, except near the state line, where it becomes more broken and abrupt. From Genesee river, near its mouth, to Jamestown on the Niagara, there is a remarkable ridge running almost the whole distance, 78 m. in a direction from E to W. Its general alt. above the neighbouring land is 30 ft., and its width in some places is not more than 120 ft. The elevation of this ridge is 160 ft. above the level of Lake Ontario, to which it descends by a gradual slope, and its distance from that lake is from 6 to 10 m. There is every reason to suppose that this ridge was once the margin of the lake. About 20 m. S, and parallel to the latter, there is another ridge which runs from Genesee river to Black Rock, the country between being called the Tonawanda valley. There is equal reason to believe that this ridge formerly marked the limit of the waters of Lake Erie.—The long narrow valley which contains Lake Champlain and the Hudson, is extremely irregular, being in some places 40 m. in breadth, and in others contracted to the immediate neighbourhood of the stream. Along the shores of the river the land is generally high, with few level tracts.—The valley of the Mohawk is seldom more than 1½ m. in breadth, and generally not more than 1 m. It is bordered by two long ranges of hills, presenting little variety of aspect. In the first part of its course it flows through extensive flats.

Rivers and Lakes. The Hudson rises in the mountainous region on the W side of Lake Champlain in several small branches, and pursues a S course to the sea at New Y. Its whole length is 324 m. From its mouth to Hudson, 130 m., it is navigable for the largest ships; and to Troy, 166 m. for sloops. For 25 m. above New York it is 1 m. wide. Where it breaks through the highlands, its navigation suffers no impediment except the narrowing of the channel, and here its waters are deeper. The precipitous and broken cliffs which project towards the river render the scenery at this point extremely grand and romantic. The combined action of the tides at the mouth of the Hudson, from its two outlets to the sea, carries the swell up the stream at the rate of 15 or 25 m. an hour. Sturgeon, shad, and herring, ascend this river in the spring, and are taken in great abundance.—The Mohawk rises near Oneida lake, and runs SE 135 m., and joins the Hudson a few miles above Albany. It is about 60 rods in breadth at Schenectady, gradually lessening to 12 or 16 at Utica. Its waters are clear, and its course diversified with beautiful islands. The intervals on both banks are rich and handsome. This stream is very unequal, and has many falls and rapids; the whole descent from its source to the Hudson is estimated at 367 ft. A canal 1½ m. in length connects the Mohawk with Wood creek, running into Oneida lake, and thence communicating with Lake Ontario.—The Genesee rises in Pennsylvania, and runs N across the W part of New York into Lake Ontario; its whole course in this state is about 125 m. About 5 m. from its mouth, at Rochester, are falls of 96 and 75 ft.; above these the stream is navigable for boats nearly 70 m., when two other falls occur of 60 and 90 ft. The harbour on the lake at the mouth of this river is called Port Genesee.—Black river, which receives its name from the colour of its waters, rises in the highlands N of the Mohawk, and its branches interlock with those of the Hudson. It pursues a NW course of 120 m., and falls into Lake Ontario near its outlet. It is a deep but sluggish stream, and the navigation is interrupted by falls, a series of which, called the Long falls, extend 14 m. The land upon this stream is generally a rich dark-coloured mould. The St. Lawrence washes a portion of the northern limit of the state. It is here wide, and has a swift

current, but its navigation is obstructed by rapids. The Oswegatchie consists of two branches, which unite 4 m. above their entrance into the St. Lawrence. The E branch is about 120 m. long, and the W nearly 100 m. The Oswego issues from Oneida lake, and runs NW into Lake Ontario. It is about 40 m. long, and is a rapid stream; its navigation is assisted by locks and canals. The Saranac rises in several large ponds, and flows NE 65 m. into Lake Champlain at Plattsburg; it is not navigable, but is a good mill stream. The Susquehanna rises in this state in a number of branches that spread over a tract of 160 m. These numerous streams are collected by two large branches, the Tioga, and the E branch or Susquehanna, which unite shortly after passing out of this state. The E branch has a course of 140 m. in New Y., and affords navigation for many rafts of timber. The Alleghany and Delaware also rise in this state.—Lakes Ontario and Champlain lie on the borders of this state. Lake George, one of the most beautiful lakes in the world, lies in the eastern part of the state, between Lake Champlain and the Hudson. It is 33 m. long, and 2 m. broad. Its greatest depth is 60 fath. It abounds with fish, such as trout, bass, and perch. The clearness of its waters, and the beautiful scenery around it, have rendered this lake the admiration of every traveller. Lake George was called by the French Lac Sacrement. An outlet 3 m. in length, and of 100 ft. descent, connects it with Lake Champlain. Many battles were fought on its borders during the early wars with the French, and in the revolution.—A cluster of small lakes lie toward the western part of this state, and discharge their waters by the Oswego river into Lake Ontario. The principal of these, beginning in the E, are: Oneida lake, 20 m. long from E to W, and about $3\frac{1}{2}$ m. wide; it receives Wood creek at the E end, by which and a canal it communicates with the Mohawk. This is a very beautiful lake, and is celebrated for the abundance of its fish. Skeneateles lake, 15 m. long, and 1 to $1\frac{1}{4}$ m. wide, also abounds with fish, and its trout are large. Owego lake is 11 m. long, and 1 to 2 m. wide. Cayuga lake is 38 m. long from N to S, and 1 to 4 m. wide. In some places the shore of this lake is precipitous, but in general it is a gentle declivity from the surrounding country to the water. Its waters are shallow, but sufficient for navigation: several steam-boats ply upon them. A bridge of 1 m. in length crosses the N end of the lake. Seneca lake, nearly parallel with Cayuga, is 35 m. long, and 2 to 4 m. wide. At its S end is an extensive marsh. Crooked lake is 18 m. long, and from $1\frac{1}{2}$ to 1 m. wide. Canandaigua lake, 14 m. long, and 1 m. wide, is a beautiful sheet of water, and surrounded by a fertile country. Another lake, called Chataouque, lies in the W extremity of the state near Lake Erie, and sends its waters S into the Alleghany river. It is 18 m. long, and from 1 to 3 m. wide.

Bays and harbours. The sea-coast of New Y. is nearly all comprised within the shores of Long island, which present a few harbours and inlets, but none that are much frequented by shipping. The bay or harbour of New Y. is very safe and capacious. Its boundaries toward the sea are Long island and Staten island. It extends 8 m. below the city, and is from $1\frac{1}{2}$ to 5 m. broad. It embosoms several small islands on which are fortifications. The Hudson enters this bay from the N. The East river, or channel between New Y. island and Long island, communicates with Long island sound on the E; the Kills, a strait between Staten island and the Jersey shore, communicate with Newark bay and the river Raritan on the W; and the Narrows open into the Atlantic toward the S. At low water the entrance

by the Narrows is somewhat difficult for large ships, and the entrance from the sound is obstructed by the rocky strait of Hell-gate. There are several harbours on Lake Ontario, the most noted of which is Sackett's harbour, toward the E end of the lake. It is deep and safe, and was an important naval station during the war of 1812. Oswego has a good artificial harbour, and Buffalo, Dunkirk, and Portland, on Lake Erie, have similar works.

Climate. As this state embraces a wide extent of territory, stretching from the lakes of Canada to the Atlantic, it must of necessity exhibit considerable diversities of climate. A district of level country around New Y. allows the sea-air to penetrate far inland. Along the Hudson, as far up as the Highlands, the climate is little different from that of the sea-coast; but beyond the mountains the mild and damp winds from the sea do not penetrate. Below the Highlands, the prevailing winds are southerly through the summer, the weather is variable, and the changes of temp., governed by the winds, frequent and sudden. The humidity of the air thus brought in from the sea, produces frequent showers in the middle and eastern region of the state. After two or three days of sultry weather, with the wind from the S, the clouds gather round the Catskill mountains and fall upon the country in thunder-gusts. To this process the S part of the state is indebted for all its supplies of rain during summer. In winter, spring, and autumn the rain and snow come in a great measure from the SE or between E and N. In the northern part, near the St. Lawrence and Lake Champlain, the weather is less variable, and the winters are long and severe, with a clear and settled sky. In the western parts, from the Catskill mountains to Lake Erie, SW winds prevail in a great proportion throughout the year; E winds are nearly unknown. In this region the average temperatures are about 3° higher than in the same lat. further E. With these distinctions kept in view, the following particulars, which relate to that portion of the country around Albany, may give a distinct idea of the climate in most parts of the state. The rigours of winter commence about the 20th of December, and end with February or by the 10th of March, at which time the ice in the Hudson usually breaks up. Between April 15th and May 5th, most of the migratory birds appear; and the lilac opens its blossoms from the 12th to the 30th March, with the appearance of the robin and blue-bird. The apple and pear are in bloom by the 25th or 30th April. The usual range of the therm. in the middle of the day, from April 10th to May 15th, is between 64° and 72°. In summer 90° is a high temp., and never continues but for a few days. Early wheat is cut about July 12th, and the wheat and rye harvest are completed about Aug. 15th. Buckwheat is cut in October. Maize ripens from the middle of September to the 10th or 20th October. Oats are reaped about the middle of August. Hay is cut from the 4th to the last of July. Winter-rye and wheat are sown from the 20th of Aug. to the last of September. The therm. in September often stands at 90°. From the middle of March to the last of April the weather is variable, and the changes of temp. great and sudden, though it is generally rainy, with long storms and E winds. May is a variable month, with the first half usually wet. In June the summer begins, and July is subject to drought. August is showery, with the greatest uniformity of temp. of any month in the year. The same weather continues to the 15th or 20th of September. In this month there is commonly an equinoctial storm. October is extremely pleasant, and is the best month for travelling except perhaps June. Early frosts, which destroy the tender garden vegetables, occur about September 26th; corn ripens as late as the middle of October. The leaves of the forest trees feel the early frosts, although they do not commonly drop before the 15th or 25th October. December is usually cold and showery, with frequent and long storms from the E and NE, with rain, hail, and snow. Sleights are little used till the end of the year. The 'Indian summer' begins about the last of October, and extends, with occasional interruptions, into December.

Soil and Geology. This extensive state exhibits every variety of soil. In the level country of the N part, to the E of Lake Ontario, and along the St. Lawrence, the soil is a warm sandy loam, and constitutes a large tract of the best land for agriculture. Around Lake Champlain there is an extensive dist. of clayey soil extending to the hills that skirt the Mohawk mountains. The alluvial flats of the Mohawk valley are highly fertile. The other parts of this valley have a stiff loam as far W as the Catskill mountains extend; beyond which the soil partakes more of the character of the western region. In this last region the hills are rocky and precipitous, and the valleys consist of black vegetable mould. The Genesee flats in the western part of the state have long been celebrated for their fertility. W of Albany are extensive sandy plains interspersed with marshes, which are rather cold. From the Highlands N to

the Mohawk, the soil is dry and warm, being in general either a gravelly or sandy loam. E of the Hudson, in this region, are rich alluvial tracts. Below the Highlands, the soil is principally dry and warm. The west end of Long island is fertile and well cultivated. In the eastern parts are sandy barren plains.—With some inconsiderable exceptions, the rock formations belong entirely to the primary and older fossiliferous or transition series. The primary rocks, which occupy the smaller portion of the surface, occur in two disconnected tracts in the SE and NE sections, but in both cases are offsets from the great primary region of New England. The southern tract includes the Highland range, which passes into Massachusetts near the SE corner of Dutchess co., the SE corner of the mainland between the highlands and the sea, and the NW part of Long island with Staten island. The prevailing rocks of this district are gneiss, mica-slate, and primitive lime-stone, with some other stratified rocks; granite occurs only in beds or veins in the other rocks. The N primitive district lies between Lakes Champlain and Ontario. Felspathic granite, traversed by green-stone dykes, gneiss, hornblende, and primitive lime-stone, are the prevailing rocks of this region. The remaining rock-formations, occupying much the greater part of the surface, belong to the older fossiliferous group, and are characterised by a great simplicity of arrangement, arising from the great extent of the several members of the group, and their undisturbed horizontal position. They present a series of terraces rising by successive steps from the N toward the S, stretching nearly across the state S of Lake Ontario and the Mohawk, from E to W, and intersected at right angles by numerous valleys of denudation, some of which are occupied by fine lakes, and others form the fertile and beautiful abodes of a prosperous population. Shales, fossiliferous limestones, sandstones, and slates, here alternate with each other in an endless variety.—The most important metallic minerals are iron and lead. Galena or sulphuret of lead occurs in several localities. Iron is very generally diffused over the E part of the state, under the various forms of magnetic oxide, the red or specular oxide, and bog-ore, all of which are worked. Beds of magnetic ore extend, with little interruption, from Canada to the vicinity of New Y. The most important localities are in Orange, Rockland, Putnam, and the NE cos. Rich beds of the specular ore occur at several localities in St. Lawrence and Jefferson cos. Bog-ore is also abundant, except in the N primitive district. Sulphuret of iron, or iron pyrites, abounds in various localities, and at Canton is used in the manufacture of cop-pers and alum. Gypsum is pretty generally diffused through the W part of the state, and is highly valued as a manure. Hydraulic limestone, furnishing good water-cement, abounds in Madison, Onondaga, and some of the neighbouring cos. Marble, freestone, gneiss, and other building-stones are plentiful and of excellent quality.

Agricultural productions.] The stock and productions of agricultural industry, as exhibited in the census of 1845, were: 505,155 horses; 2,072,330 neat cattle, of which number 999,490 were giving milk, and produced 79,501,733½ lbs. of butter and 36,744,976 lbs. of cheese; 6,443,855 sheep, producing 4,607,002 fleeces, and 13,864,828 lbs. of wool; and 1,584,344 hogs. The cereal productions, as compared with those of 1840, were as follows:

	Wheat.	Indian corn.	Rye.	Oats.
1840	12,286,418	10,972,286	2,979,323	...
1845	13,391,770	14,722,114	2,966,522	26,329,051 "
	Buckwheat.	Barley.	Potatoes.	
1840	2,287,885	2,520,060	30,125,614	bush
1845	2,684,679	3,108,704	23,653,418	"

The number of pounds of flax raised were, respectively, in 1840, 2,712,000, and in 1845, 2,897,062. By the same census of 1845 it was ascertained that 192,503 acres were sown with barley; 117,379 with pease; 16,231 with beans; 255,495 with buckwheat; 15,322 with turnips; 255,162 with potatoes; 46,089 with flax; 1,013,665 with wheat, of which only 958,233 were harvested; 595,135 with Indian corn; 317,099 with rye; and 1,026,915 with oats. The average products to the acre were, barley, 16½ bushels; pease, 15; beans, 10; buckwheat, 14½; turnips, 88; potatoes, 92½; wheat, 13½; Indian corn, 54½; rye, 9½; and oats, 26. Flax yielded 62½ lbs. to the acre. The quantity of the following articles of production is from the census of 1840: hops, 447,250 lbs.; silk cocoons, 1,735 lbs.; maple sugar, 10,048,109 lbs.; and hay, 3,127,047 tons. Beside the above staples, fruit, lumber, wine, pot and pearl ashes, tar, pitch, and turpentine, &c., are items of some consideration to the farmer.

Manufactures.] The manufactures of this state are equally extensive with its other departments of industry. In 1845, there were 118 cotton factories, using annually raw material to the value of 1,132,702 dol., and producing 31,234,633 yds. of cloth, valued at 2,877,500 d.; 345 woollen factories, consuming raw material to the value of 2,877,804 d., and producing 4,916,998 yds. of woollen, and 1,592,890 yds. of cotton and woollen cloths, valued at 4,281,257 d.; 71 incorporated, and 1,608 unincorporated silk factories; 1,984 grist-mills; 7,406 saw-mills; 87 oil-mills; 740 fulling-mills; and 820 carding-mills. The number of iron-works was 500; trip-hammers, 156; distilleries, 221; asheries, 738; glass-factories, 15; rope-factories, 79; chain-cable factories, 7; oil-cloth factories, 24; dyeing and printing factories, 18; clover-mills, 115; paper-mills, 82; tanneries, 1,414; and breweries, 102. The total amount invested in manufactures, in 1840, was 55,252,779 d.; and in 1845, about 9 per cent. increase.

Commerce.] As a commercial state, New Y. surpasses all others in the Union. The value of the exports, for the year ending 30th June, 1846, was 36,935,413 d., of which 29,585,866 d. was the value of domestic, and 7,349,547 d. of foreign products. The imports were valued at 74,254,288 d., of which 65,903,763 d. arrived in American, and 8,350,520 d. in foreign bottoms. The aggregate tonnage of New Y. is about 2,300,000 tons. In 1840, there were in the state 469 commercial, and 1,044 commission houses in the foreign trade, with a capital of 49,533,001 d.; 12,207 retail stores, with a capital of 42,135,795 d.; 9,592 persons engaged in the lumber-business; 7,593 in internal transportation; and 1,228 in the fisheries, which employed a capital of 949,250 d.—The banks of New Y. are one of its distinguishing features, and exercise a barometric effect on the financial condition of all the other states. The laws of the state require a quarterly statement to be made to the comptroller. See article on NEW YORK CITY.

Canals.] New Y. surpasses every state in the Union for canals. The great Erie and Hudson canal, from Albany to Buffalo, was begun in 1817, and finished in 1825, at the cost of above 7,000,000 dol. It is 370 m. long, and was originally 40 ft. wide and 4 ft. deep, but has been deepened to 6 ft., and widened to 70 ft. Lake Erie is 565 ft. above the Hudson at Albany, and the whole rise and fall of lockage on the canal is 698 ft. See ERIE CANAL. A number of side-cuts branch off from the canal to different places. One of these, from Syracuse to Oswego, is 88 m. long; another, from Montezuma to Cayuga and Seneca lake, 20 m. Crooked Lake canal, 8 m. in length, and Chemung canal, 23 m. connect Lake Seneca with Crooked Lake and the Susquehanna. The canal boats for the conveyance of passengers are generally 80 ft. in length and 14 ft. in width, drawing from 1 to 2 ft. of water. The cabin occupies nearly the whole length of the deck, and is 8 ft. in height, with single berths on each side for 30 persons. They are drawn by 3 horses, and proceed day and night 4 m. an hour. Boats with merchandise go about 55 m. in 24 hours; the passenger-boats make, including delays, 85 m. progress in the same time.

The Chenango canal, begun in 1833 and completed in 1837, extends from the Erie canal at Utica up the valleys of the Susquehanna and Oriskany creeks, and down that of the Chenango to the Susquehanna at Binghamton, 97 m. Rise from Erie canal to summit level, 706 ft., fall thence to the Susquehanna, 303 ft.—The Champlain canal extends from the Erie canal in Watervliet, on the S side of the Mohawk, up the valley of the Hudson, crossing that river in Saratoga, leaving it at Fort Edward, and passing down the valley of Wood creek to Lake Champlain at Whitehall. Its length is 64 m.—The Genesee and Alleghany canal, extends from Rochester up the valley of the Genesee, and thence by that of Oil creek to the Alleghany, at Olean, 107 m., with a branch from Mount-Morris to Danville, 15 m. Its summit level at Portage is 979 ft. above the Erie canal at Rochester. The northern branch or Black River canal extends from the main trunk at Rome to the foot of the High Falls in Leyden, on Black river, 55 m., with a navigable feeder of 11 m. from near Boonville to the upper streams of Black river.—The Delaware and Hudson canal, beginning at Eddyville, on the Roundout creek, 3 m. from the Hudson, ascends the valley of the creek, and passing into that of the Neversink, follows it down to the Delaware; it then runs up along the latter to the mouth of the Lackawanna, and up this river to Honesdale in Pennsylvania. Its length is 109 m., depth 4 ft., width at surface 22 to 38 ft. The chief object of this canal is the transportation of coal, and a railroad from Honesdale to Carbondale, 16 m., affords access to the Wyoming coal-field.—The total length of the artificial navigable channels of this state, including the two unfinished works, is about 950 m., made at an expense of about 20,000,000 d. There are also about 500 m. of river and lake navigation within its borders, and a frontier line of navigable lakes and rivers of about 400 m. Ship-cannals have been projected round the falls of Niagara, from the river Seneca to Great Sodus bay on Lake Ontario, and from Oswego by the Oswego and Oneida rivers, Lake Oneida, and the Mohawk to the Hudson.

Amount and Value of Goods cleared on the State canals in 1836.

	Tons.	Value.
Produce of the forest (lumber, timber, staves, ashes, &c.),	755,252	7,282,438 d.
Produce of animals (butter, cheese, provisions, wool, &c.),	24,025	5,328,028
Vegetable food (wheat, flour, &c.),	193,810	12,102,863
Other agricultural produce,	5,993	1,188,943
Manufactures,	88,810	7,380,576
Merchandise,	127,895	21,973,804
Other articles,	113,103	2,877,631
Totals.	1,310,897	67,634,943

The total tonnage of all property on the canals, ascending and descending, its value, and the amount of tolls collected for 17 years, are as follows:

Year.	Tons.	Value.	Tolls.
1836	1,310,897	67,634,345 d.	1,614,342 d.
1837	1,171,296	55,809,288	1,292,623
1838	1,353,011	65,746,559	1,590,911
1839	1,435,713	73,399,764	1,616,382
1840	1,416,646	66,360,892	1,775,747
1841	1,521,661	92,202,929	2,034,882
1842	1,236,931	60,016,608	1,749,196
1843	1,513,439	76,276,909	2,081,590
1844	1,816,586	90,921,152	2,446,374
1845	1,985,011	100,553,245	2,646,181
1846	2,268,662	115,612,109	2,756,106
1847	2,869,810	151,565,428	3,635,381
1848	2,796,230	140,086,157	3,252,212
1849	2,894,732	144,732,285	3,268,226
1850	3,076,617	156,397,929	3,273,899
1851	3,582,733	189,981,801	3,329,727
1852	3,865,441	196,605,517	3,118,004

The decrease in the charge on up freight is striking. It has fallen from one dollar in 1820, including tolls and freights, to 26 cents in 1852. And the carrier who got 49 cents in 1850, got only 11 cents in 1852, or about $\frac{1}{4}$ cents for carrying 100 pounds 100 m.

Aggregate of property arriving at tide water.

The total tons coming to tide water from Erie and Champlain canals, for each of the last nineteen years, and the aggregate value thereof in market was as follows:—

Year.	Tons.	Value.	Year.	Tons.	Value.
1834	553,596	13,405,022 d.	1844	1,019,094	34,183,167 d.
1835	753,191	20,525,446	1845	1,204,943	45,452,321
1836	696,347	26,932,476	1846	1,362,319	51,105,256
1837	611,781	21,822,354	1847	1,744,283	73,692,414
1838	640,481	23,038,510	1848	1,447,965	50,883,907
1839	602,128	20,163,199	1849	1,579,946	52,375,521
1840	669,012	23,213,573	1850	2,033,863	55,474,637
1841	774,334	27,225,322	1851	1,977,151	53,927,508
1842	666,626	22,761,013	1852	2,234,822	66,893,102
1843	856,561	28,453,408			

The aggregate value of wheat and flour.

The whole quantity of wheat and flour which came to the Hudson river, from 1834 to 1852, inclusive, with the aggregate mar-

ket value of the same, and the amount of tolls received on all the wheat and flour transported on the canals in each year, from 1837 to 1852, inclusive, was as follows:—

Year.	Tons.	Value.	Tolls.
1834	130,452	5,719,795 d.	Not ascertained.
1835	128,552	7,395,939	do.
1836	124,982	9,796,530	do.
1837	116,491	9,640,156	301,739 d.
1838	123,080	9,883,586	380,161
1839	124,683	7,217,841	404,525
1840	244,862	10,367,862	700,071
1841	201,360	10,165,355	621,046
1842	198,231	9,284,778	606,727
1843	248,780	10,283,454	731,816
1844	277,865	11,211,677	816,711
1845	320,463	15,962,950	851,533
1846	419,366	18,836,412	1,099,325
1847	551,205	32,890,938	1,460,424
1848	431,641	21,148,421	1,126,133
1849	434,444	19,308,595	1,128,064
1850	461,781	20,218,188	1,114,519
1851	457,624	16,487,652	867,881
1852	576,772	22,564,256	995,160

Trade of the Western states and of New York discriminated.

The following statement gives the total tonnage arriving at tidewater, by way of the Erie canal, for a series of 17 years, distinguishing between the tonnage from this state, and the tonnage from Western states:

Year.	From Western states.	From New York.	Total.
1836	54,219 tons.	364,806 tons.	419,125 tons.
1837	56,255	351,251	387,506
1838	83,233	356,016	439,249
1839	121,671	264,596	386,267
1840	158,148	309,167	467,315
1841	224,176	308,314	532,520
1842	221,477	258,672	480,149
1843	256,376	378,969	635,345
1844	308,025	491,791	799,816
1845	304,961	655,039	959,990
1846	566,830	600,662	1,167,279
1847	812,840	618,412	1,431,252
1848	860,154	534,183	1,394,337
1849	768,659	498,068	1,266,724
1850	773,858	508,901	1,271,359
1851	966,993	541,684	1,508,677
1852	1,152,978	492,721	1,644,699

Comparative values of Flour.

The average price of flour each year at Albany is also given:

Year.	Western states.	New York.	Bbls. arriving at tide-water.	Price.
1835	268,259	868,561	1,136,778	2 d. 50 c.
1836	317,103	775,979	1,093,087	8 75
1837	284,902	747,676	1,032,578	9 50
1838	552,283	637,036	1,189,319	8 50
1839	683,509	425,544	1,109,053	6 50
1840	1,666,615	1,080,084	2,746,699	4 84
1841	1,232,987	596,657	1,829,644	6 00
1842	1,146,292	543,064	1,677,051	5 18
1843	1,568,645	670,532	2,239,177	4 56
1844	1,727,714	746,939	2,474,653	4 50
1845	1,553,740	1,268,416	2,842,156	5 51
1846	2,733,474	923,330	3,652,804	5 05
1847	4,989,222	751,107	4,780,358	6 84
1848	2,983,688	770,114	3,753,802	5 53
1849	2,842,821	886,938	3,739,759	5 00
1850	2,084,959	905,277	3,990,236	5 00
1851	3,486,734	495,467	3,991,201	4 00
1852	3,937,366	877,731	4,815,097	4 53

Of the 3,118,244 d. collected during 1852, of navigation, there was paid:

On flour and wheat,	995,160 d.
On other products,	1,323,024
Total on down freight,	2,318,084
On up freight or merchandise,	799,160
Total,	3,118,244

Railroads.] The railroads in this state are wholly the work of incorporated companies, but the state has lent its credit in aid of one great work of general interest,—the connection of the Hudson and Lake Erie by railroad. The Long Island railroad extends from Brooklyn to Greenport, 96 m. A ferry of 25 m. from Greenport to Stonington connects this line with the Stonington and Boston railroad. The Rensselaer and Saratoga railroad extends from Troy to Ballston Spa, 24½ m. The Mohawk and Hudson railroad runs from Albany to Schenectady, 16 m., and is continued by the Schenectady and Saratoga railroad, running from the former place to Saratoga Spring, 21½ m. The Utica and Schenectady railroad, running along the N bank of the Mohawk, connects these two places, 78 m. The Utica and Syracuse railroad, 50 m., forms the connecting link between Albany and Auburn, a distance of 139

m. by means of the Auburn and Syracuse railroad, of 25 m., which extends from Syracuse to Auburn. The Tonawanda railroad extends from Rochester through Batavia to Attica, 47 m., and is connected with Lake Ontario by the Rochester railroad, of 8 m. The Lockport and Niagara-Falls railroad connects those two points, 20 m. The Buffalo and Niagara-Falls railroad runs from Buffalo to the Falls, 23 m. The Ithaca and Oswego railroad connects Lake Cayuga with the Susquehanna, 29 m. The Hudson and Berkshire railroad extends from the city of Hudson to the Massachusetts line towards West Stockbridge, 32 m., and the Catskill and Canajoharie road continues this route from the former place on the Hudson to the latter on the Mohawk, 70 m. The Haerlem railroad, from New Y. to Haerlem, although but a few miles long, is remarkable for its solid and costly viaducts, and its tunnel of 600 ft. cut through a hard granite rock. The New York and Albany railroad is to follow the route of this work. The New York and Erie railroad, the greatest undertaking of the kind in the States, if we except the Charleston and Cincinnati railroad, is to extend from Tappan on the Hudson, 24 m. above New Y., through the southern border cos. to Dunkirk on Lake Erie, 446 m. The cost of the work is estimated at 10,000,000 d.

Population.] The state of New Y., according to a census taken in 1845, contained 59 counties, 843 townships, 11 cities, and about 180 incorporated and from 700 to 800 non-incorporated villages. The pop., at several periods, and its progressive increase, are exhibited in the annexed table:

Years.	Population.	DECENNIAL INCREASE.	
		Numerical.	Per cent.
1790.	340,120
1800.	586,756	246,636	72.5
1810.	959,949	373,193	68.6
1820.	1,372,812	412,863	43.0
1830.	1,918,608	545,796	39.8
1840.	2,428,921	510,313	26.6
1850.	3,098,818	669,897	27.7

The employments of the pop., in 1840, were as follows: In agriculture, 455,954; in commerce, 28,468; in manufactures and trade, 173,193; in mining, 1,898; in ocean-navigation, 5,511; in internal navigation, 10,167; and in the learned professions, 14,111. The division of castes and sexes was thus:

	Whites.	Coloured.	Total.
Males.	1,207,357	23,809	1,231,166
Females.	1,171,533	26,222	1,197,755
	2,378,890	50,031	2,428,921

In 1845, the numbers of the people, natives of the state, were 1,894,278, or nearly three-fourths; of the Eastern states, 228,881; of other states, 83,642; of Mexico and South America, 977; of Great Britain and Ireland, 277,890; of France, 10,619; of Germany, 49,558; and of the other parts of Europe, 8,222. The numbers liable for military duty were 228,292, and the paupers amounted to 8,909, of whom one-fourth belonged to the city of New Y.

Immigration.] The following table exhibits a comparative view of the immigration from all the countries for the 4 years noted:

Nation.	1849.	1850.	1851.	1852.
Ireland	112,691	116,582	163,256	115,537
Germany	55,705	46,402	69,883	118,120
England	28,321	28,125	28,553	31,271
Scotland	8,840	6,771	7,302	7,648
Wales	1,782	1,520	2,189	2,530
France	2,683	3,398	6,064	8,776
Spain	214	257	278	455
Switzerland	1,405	2,351	4,499	6,455
Holland	2,447	1,174	1,789	1,229
Norway	3,300	3,150	2,112	1,889
Sweden	1,007	1,110	872	2,066
Denmark	159	90	229	156
Italy	602	475	618	358
Portugal	287	55	26	29
Belgium	118	230	475	82
West Indies	449	554	575	265
Nova Scotia	151	161	81	75
Sardinia	172	165	98	69
South America	33	103	221	120
Canada	59	61	50	48
China	9	11	9	14
Sicily	21	28	11	42
Mexico	23	41	42	22
Russia	58	18	23	33
East Indies	34	32	10	18

Y.

Turkey	6	5	4	4
Greece	6	3	1	6
Poland	133	183	142	186
Arabia	8
Total	220,603	211,796	289,601	298,504

Ecclesiastical statistics.] The religious denominations of this state are very heterogeneous, comprising churches of every creed, and persons of every shade of opinion. The Protestant Episcopal church was established by law previous to the revolution, and has retained its influence here in a greater degree than elsewhere. It is presided over by two bishops, the see of one being 'New Y.' and of the other 'Western New Y.' The whole number of churches belonging to this denomination was, in 1845, 238; the clergy, in 1848, numbered 245 in the dio. of New Y., and 104 in that of Western New Y. The Catholics had in 1845, 104 churches, and a large number of other religious and charitable institutions: they are chiefly confined to the large Atlantic cities, where the Irish and other Catholic foreigners are most numerous. Of the evangelical churches the Episcopal Methodist are decidedly the most numerous; they had 892 travelling, 102 supernumerary, and 860 local preachers, 141,937 church-members, and 78,237 Sunday scholars, in 1845. The regular Baptists had 43 associations, 750 ministers, 116 licensed preachers, 811 churches, and 87,776 communicants; and the Anti-Mission Baptists had two associations, 14 ministers, three licensed preachers, 25 churches, and 964 members. The Presbyterians had 3 synods, 219 ministers, 172 churches, and 21,555 members. The Congregationalists had 123 ministers, 130 churches, and 6,719 members. The Universalists had 16 associations, 252 societies, 163 meeting-houses, and 144 preachers. The Unitarians had 66 churches; the Dutch Reformed, 160; the German Reformed were also numerous, and the Quakers had 153 meeting-houses. The Lutherans and Moravians are also well represented. The Jews had 15 synagogues, and form a highly respectable class: they are chiefly confined to the large cities, being altogether occupied in trade and commerce.—By the census of 1845, it appears that in the state of New Y. there were 10 colleges, 163 academies, 55 female seminaries, and 22 other educational institutions of a higher grade. The state also supports 2 normal schools for the education of teachers. There were, at the above date, 10,707 common schools, with 291,595 scholars, and 1,569 private schools, with 44,783 pupils. The amount of capital, and the annual revenue of the several funds appropriated to the purposes of education, in 1846, were as follow, viz.:

	Capital.	Revenue.
Common School fund.	2,183,943 d. 01 c.	117,180 d. 60 c.
United States' Deposit fund.	4,014,520 71	275,667 50
Literature fund.	265,195 81	17,558 99
	6,143,662 d. 23 c.	411,202 d. 19 c.

There was also paid directly from the treasury for the deaf and dumb, 25,192 d. 99 c.; for the blind, 17,675 d. 48 c.—making the whole amount paid, in 1846, for purposes of education, 453,970 d. 66 c. Besides the above amounts, every city and town is separately taxed for the same purpose, and large sums are also raised by voluntary subscriptions, the whole probably to five times the amount appropriated by the state. The following table exhibits the condition of the principal colleges in 1847:

Name.	Location.	Founded.	Profes.	Alumni.	Stud.
Columbia	New York	1754	13	1,170	114
Union	Schenectady	1795	13	2,366	229
Hamilton	Clinton	1812	10	126	171
Madison Univ.	Hamilton	1819	9	140	144
Geneva	Geneva	1823	9	...	66
Univ. of N. York	New York	1831	11	329	146
St. John's	Fordham	1841	16	10	130

Theological schools are established at various places by the several denominations of Christians, the principal of which are the Theological institute and Union Theological seminary, at New Y., the former under the surveillance of the Protestant Episcopalians, and the latter of the Presbyterians; the Theological seminary, at Auburn, under the Presbyterians; the Hamilton Literary and Theological institute, under the Baptists; the Hartwick seminary, under the Lutherans; the Theological seminary, at Newburgh, under the Associate Reformed church; and St. John's college, at Fordham, under the Roman Catholics. Law schools are attached to Columbia college and the university of New York. The principal Medical schools are those of the College of Physicians and Surgeons, and the Medical department of the University in the city of New Y.; the Medical institution attached to Geneva college, and the Albany Medical college; each of these has 6 teachers, and an aggregate number of students numbering 901, in 1847.—The total number of young persons constantly receiving instruction in the various educational establishments throughout the state, is about 640,000, and the expense may not be less than 4 d. each, amounting, in the aggregate, to 2,560,000 d. per ann., or a little less than 1 dollar to each inhabitant.

Constitution.] The constitution under which the state is now organized was adopted in convention on the 9th Oct. 1846, and ratified by the people on the 2d Nov. of the same year. Every male citizen of 21

2 M

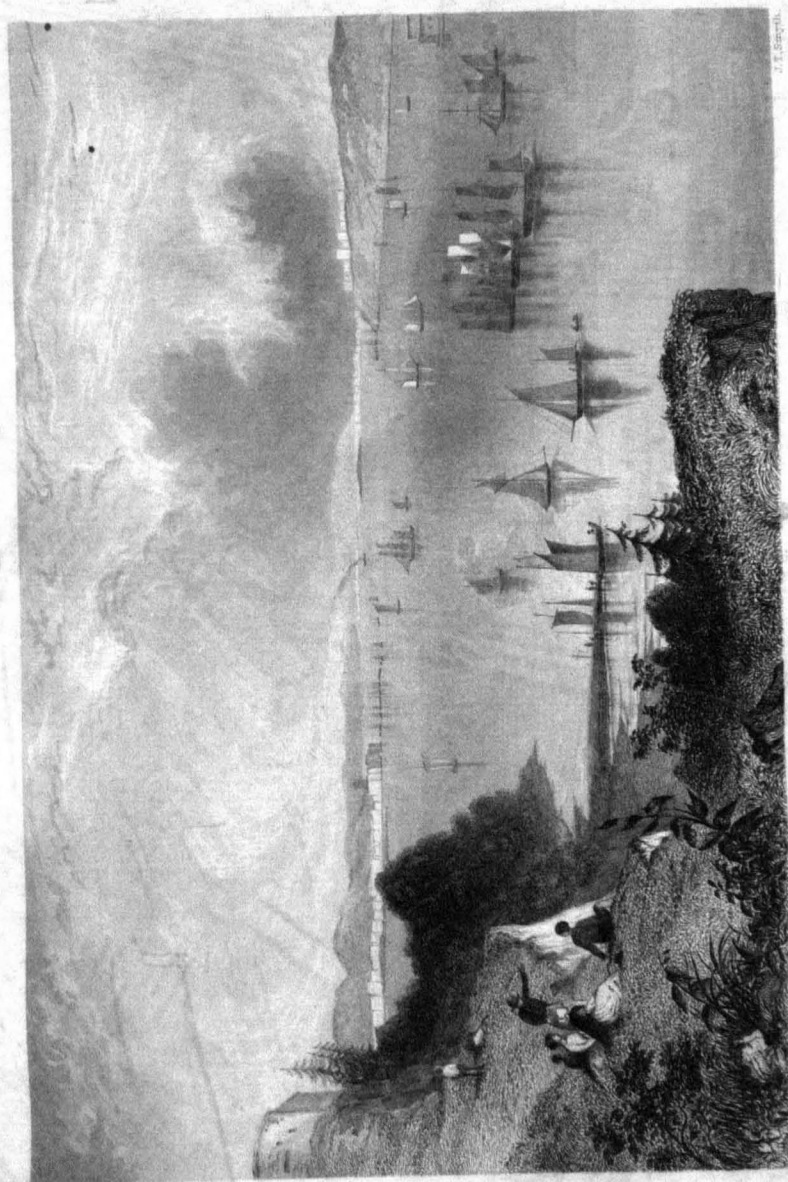
years of age is eligible to vote, but he must have been such 10 days previous to the election, and have been an inhabitant of the state 1 year, of the county 4 months, and of the district where he offers his vote, 30 days next preceding. Coloured persons must have resided 3 years, and own a freehold of 250 doll. value, and have paid a tax. Convicts and persons betting or interested in a bet on the result of an election, are by law deprived of suffrage. The state is divided into 32 districts, each of which chooses a senator to serve 2 years,—the whole to constitute the senate, and 16 of whom go out annually. The members of assembly, which, together with the senate, constitute the legislature, are 128 in number, and are distributed according to pop., but each co. except Hamilton is entitled to one assemblyman. The pay of senators and assemblymen is alike, 3 doll. per day; the speaker receives 4 doll. The elections are held on the Tuesday succeeding the first Monday in November; and the legislature assembles at Albany on the first Tuesday in January. The governor and lieutenant-governor are elected for 2 years, by a plurality of all the votes. In case there are two candidates having the highest and equal number of votes, the election is decided by joint ballot of the two houses. Each must be at least 30 years of age, citizens of the United States, and have resided in the state 5 years next preceding. The lieutenant-governor is *ex officio* president of the senate, but has only a casting vote. In case of death or disability of the governor, he succeeds to the office. The governor has a *veto* on all acts of the legislature, but all acts afterwards receiving a two-thirds vote are constitutionally valid without his signature. His salary is only 4,500 doll. per ann. The secretary of state, comptroller, treasurer, attorney-general, state engineer, and surveyor, are elected for 2 years, at the general election, and canal commissioners, who each receive 1,700 doll., are elected for 3 years, one being elected each year.—The judiciary is vested in a number of courts. The court for the trial of impeachments consists of the senate and justices of the court-of-appeals. The court-of-appeals consists of 8 judges, who are elected for 8 years, and so classified that two are elected every second year. The salary of each judge is 2,500 doll. The state is divided into 8 judicial districts, of which the city of New York is one, and in this city the number of justices is fixed by a special law. In each of the other districts, 4 justices of the supreme court are elected to serve 8 years. The justices have general jurisdiction in law and equity. Each co. except New York, elects one co. judge for 4 years, who also acts as surrogate; but cos. having more than 40,000 inhabitants may elect a separate surrogate. Towns elect justices-of-the-peace to serve 4 years. Cities may have inferior local courts of civil and criminal jurisdiction.—The constitution provides for the payment of the public debt by a sinking fund; forbids the state to give its credit to any individual or corporation; and denies the further accumulation of indebtedness, except for casual deficits, or in case of insurrection or invasion, until the present debt is extinguished. No corporation nor banks are to be constituted by a special law, but general laws are to be enacted. If a bank becomes insolvent, bill-holders shall be preferred creditors. The school-fund is to be preserved inviolate; persons having conscientious scruples are exempt from military duty; truth may be advanced in libel cases; all feudal tenures are abolished; and leases not to be for more than 12 years. The constitution may be revised every 20 years, but not without the consent of the majority of the people.

Financial affairs. The public debt of the state, on the 30th Sept. 1847, amounted to 24,446,590 doll.,

of which sum 16,773,789 d. were contracted for the construction of the canals, and the remainder for contingent and general purposes. The ordinary expenses of the government, exclusive of the interest on debt, is about 550,000 d. annually, which are met by taxes and fees of various kinds. The canals of the state for 1847 produced a net revenue of 2,888,005 d., a sum equal to 9½ per cent. on the whole sum expended on their construction. The state has also lent its credit to several railroad companies, and issued stock to the amount of 5,228,700 d., on which interest is paid on account of such companies as have become insolvent, to the amount of 200,236 d. per ann.; this stock belongs to the general fund debt. The governor's message in 1851 reported that the direct debt consisted of 22,895,038-99 doll., composed of the canal debt, amounting to 16,505,345 doll., and the general fund debt of 6,389,693-32 doll. Two sinking funds are applicable to the discharge of these, and the surplus of these amounted to 214,392-17 doll. The general fund had a revenue of 792,451-69 doll., and the canal revenue was 3,442,906-62 doll. The value of the public works for which any debt has been created, and of other property which may be applied to the entire extinction of the public debt, is upwards of 90,000,000 doll.—The cities of the state are New York, Brooklyn, Albany, Hudson, Troy, Buffalo, Rochester, Utica, Schenectady, Syracuse, and Oswego. There are also 160 incorporated villages, and between 700 and 800 villages not incorporated. Many of the incorporated villages are places of extensive trade and commercial importance, especially those on the Hudson river and the lakes, and on the lines of the canals and railroads. Among the larger villages may be mentioned Williamsburg, adjoining Brooklyn on the E; Jamaica, Sag harbour, Sing-Sing, Newburg, Poughkeepsie, Waterford, Herkimer, Lyons, Palmyra, Batavia, and Lockport.

History. It has been supposed that New-York was first discovered by Verazzano, an Italian, but history generally attributes that honour to Hendrick Hudson, an English navigator, then in the service of the Dutch West Indian company. He sailed up the river which still bears his name, in 1609, and subsequently sold his claim to the Dutch government. A colony of that nation settled at Fort Orange, in 1614, and in the following year built some fortifications on the S point of Manhattan, now New York island, to which they gave the name of New Amsterdam. The territory claimed by the Dutch extended from Fort Good Hope, on the Connecticut river, to Fort Nassau on the Delaware, and undefinedly northward: to this they gave the name of New Netherlands. The English laid claim also to these lands, and in 1664, Charles II. granted the whole country to his brother, the Duke of York and Albany, and sent an army under Col. Nichols to enforce a surrender and expel the Dutch. The name of Fort Orange was now changed to Albany, and New Amsterdam to New York, the whole territory also taking the latter name in honour of the patentee. The colony was recaptured in 1673, and remained in the hands of the Dutch until the ensuing year, when it was restored to the English. During the seven years' war with the French, New York suffered much from their incursions, accompanied with the Indian savages, and the country was almost desolate, when the peace of Paris restored tranquillity, and gave Canada to the British. During the revolution which soon followed, it was the scene of many important warlike movements. New York city was held by the British after the battle of Long Island until the final evacuation on the 25th November, 1783, a day which has ever since been celebrated as a national anniversary by the inhabitants of the whole Union.

NEW YORK, the commercial capital of the North American Union, is located in the S part of the state, on Manhattan island, at the confluence of the Hudson and East rivers. The East river, and a small strait called the Harlem river, divide the island from the main land. The city, which is co-extensive with the county, occupies the whole island, and is 13½ m. long, with an average width of 1½ m. Its greatest breadth is 2½ m., and it contains an area of 14,200 sq. acres. The surface is very irregular, and consists chiefly of sand, in which are imbedded rocks of various species. The dense and populous part of the city has a circumf.



NEW YORK BAY.
from the Telegraph Station.

of about 9 or 10 m. The lower part, or that originally built, is irregularly laid out, but the upper portion has been laid out in a rectangular form. The pop., in 1845, was 371,102, of which 180,365 were males, and 190,737 females; in 1850, the pop. was returned at 515,394. There are several smaller islands belonging to the city, which are located in the Bay and East river, fronting its E and S portions, the principal of which are Governor's island, Bedlow's, Blackwell's, and Randal's. The two first of which are used by the United States as strongholds, and the others by the city-authorities for almshouse and hospital purposes.

Harbour. The bay and harbour of New Y. is one of the most beautiful and safe in the world, and gives free ingress and egress to vessels of the largest class at all seasons of the year. On the Long Island side, on the E, lies the city of Brooklyn. At a distance of 8 m. from the Battery, S, is Staten island, with its highlands and neat villages; and on the W the Jersey shore, with Jersey city, Hoboken and Weehawken in sight, presenting a view of unsurpassed beauty and magnificence. The Battery, a public promenade, embowered in trees, and laid out in grass with gravel walks, is at the extreme S point of the city, and overlooks the bay, the Hudson and East river. Castle-Garden, built at the mouth of the Hudson, and connected with the W point of the battery by a bridge of about 100 yds. long, for several years past has been used as a place of public resort. At the entrance of the harbour are the Narrows formed by the approximation of Staten and Long islands. This pass is about $\frac{1}{2}$ m. wide, and is strongly fortified. Fort-Diamond is built on a reef, 200 yds. from the E shore, and is covered by Fort-Hamilton, which stands on an elevated site directly in its rear. Fort-Tompkins and Richmond, both strong works, defend the pass on the W side. In the bay are three islands, Governor's, Bedlow's, and Ellis's, all of which are well fortified, and together afford a safe protection from their respective directions; while at Throg's Neck, about 14 m. to the E, the eastern passage is protected by fortifications. Shipping from every maritime nation, and merchantmen of every size, line the wharves of the city on both sides, for the distance of 3 m., presenting a continuous forest of spars and cordage, mingled with the chimneys of numerous steamboats. Upwards of 1,000 sail vessels, 80 steamboats and steamships, 70 or 80 tow-boats, and 200 canal boats, may usually be found in the harbour of New Y. during the business-season. In the coldest winter this harbour is never obstructed by ice, so that vessels bound out or in are never delayed on that account.

Public Buildings. The public buildings, which are generally of a costly nature, are numerous, including many magnificent churches and places of popular amusement.—The city-hall stands in the park, $\frac{1}{2}$ m. from the battery. It is built on three sides of white marble, and in the rear of red freestone. The building is entered from the front by twelve marble steps. A double circular stair-case, also of marble, leads to the second story, through the centre of the building; at the top of the stairway is a circular gallery, with marble floor, from which rise 10 marble columns of the Corinthian order supporting a splendid dome and sky-light. On this floor are the chambers of the two boards of the common council; the governor's room, hung with national portraits; and the chambers occupied by the city courts. The rooms on the first floor are occupied by the mayor and other officers of the corporation; the basement is appropriated as a mechanic's institution, the grand jury rooms, and other public offices. The building is surmounted by a cupola in which is placed a clock; there is also a

room, constantly occupied, night and day, by a watchman, whose duty it is to keep a constant look-out for fires, and give notice of their occurrence and location by a given number of strokes on an immense bell which hangs in a belfry in the rear of the cupola, and which is used for no other purpose. Its sound may be heard from one end of the city to the other, and is immediately responded to by a hundred others in every direction.—The merchants' exchange is located in Wall-street, extending through to Exchange-street, and from William to Hanover streets. It is built of Quincy granite, and is 200 ft. long by 171 to 144 ft. wide, 77 ft. high to the top of the cornice, and 124 ft. to the top of the dome. The front has a recessed portico with 18 Grecian Ionic columns, 38 ft. high, and 4 ft. 4 in. thick, each one solid block of stone weighing 43 tons. The building occupies the site of the exchange destroyed in the great fire of 1835. It is entirely fire-proof, having no wood-work in its construction, except the doors and window frames.—The custom-house, situated on the corner of Nassau and Wall streets, is 200 ft. long, 90 ft. wide, and 80 ft. high, and is built in the most substantial manner of white marble. The entrance to the portico is reached by 18 marble steps, and the portico is embellished with 8 Grecian Doric columns, of the same material, 32 ft. high, and 5 ft. 8 in. thick. The rear portico is similarly ornamented, but in consequence of the rise of land from Wall to Pine-street, the ascent is only by three steps. The great business hall is a rotunda, 60 ft. in diameter, with recesses and galleries; it is surmounted by an elaborate stuccoed dome, supported by 16 elegant Corinthian columns, 30 ft. high. The cost of the building and ground was 1,175,000 d.; of the building alone, 950,000 d. This building is also perfectly fire-proof, and stands on the site of the old city hall, on the steps of which General Washington was inaugurated first president of the United States.—The halls of justice are 253 ft. long, by 200 ft. wide, and built in the massive Egyptian style of architecture, of granite quarried at Hallowell in Maine. In this building is held the court-of-sessions, and the principal police court; it contains also the city-prison or house-of detention, with 148 cells for different classes of prisoners.—The Washington monument, now in process of erection, is built of a species of blue rock, a material which is continued up 17 ft. above ground, from a square base of 81 ft. Here the marble work for the obelisk commences. The obelisk is to be 500 ft. high, 55 ft. square at the base, and 33 ft. square at the top. The walls are 15 ft. thick at the commencement, leaving a space inside 25 ft. square, which will be of the same dimensions all the way up. The outside is constructed of what is known as Syring-ton's large crystal marble, from the vicinity of Baltimore. The main body of the wall is of blue gneiss, and with this the interior is lined except where blocks presented by states or associations have been inserted. The above are only a few of the principal buildings appropriated to public business. There are numerous others, as the university, the lyceum of natural history, Columbia college, the city-hospital, several asylums, the Astor-house and other hotels, the new post-office, the revenue-office, and a great number of splendid private mansions.—Of the churches, many of which are superb specimens of architectural taste, the Church of the Holy Trinity is the most magnificent, and having a large open space about it, presents its symmetrical and elaborate structure to advantage on every side. It is built of brown freestone and surmounted by a gilded cross at the height of 264 ft. The building is of Gothic structure. The effect of the interior is grand and imposing. Grace church is the next in point of magnificence. It is

built of white marble, in the Gothic style, and the interior is arranged with elegance and taste. St. Thomas' is a beautiful structure of rough stone. The Reformed Dutch church is a beautiful building in the Gothic style. The new Unitarian church is also a fine building. The whole number of churches is 172, of which 23 are Baptist, 33 Protestant Episcopal, 30 Presbyterian, 6 Congregational, 30 Methodist, 13 Roman Catholic, 23 Reformed Dutch, 3 Universalist, 1 Unitarian, 6 Jewish, and 4 Quaker. —New Y. has few public grounds, but those are beautiful and well appreciated by the public. The city is supplied with an abundance of pure and wholesome water through an aqueduct of stone-masonry, laid in hydraulic cement, under ground, from Croton river, a distance of 40 m., to the receiving reservoir. See article CROTON CREEK. —New Y. has numerous literary, scientific, and benevolent institutions, each of which is of great utility in its peculiar modes of doing good. It has also several well-regulated theatres and operas, the principal of which are the Park, Bowery, Broadway, Astor, Chatham, Castle-garden, and some others of minor importance.

[Commerce.] The annexed table shows the results of the commerce of New Y. in 1849 and 1850:

IMPORTS AT NEW YORK.			
	1849.		1850.
Paying duty, . . .	78,583,223 d.	96,336,625 d.	
Free, . . .	8,028,579	7,890,878	
Specie and bullion, . .	2,813,380	10,502,116	
Total, . . .	89,425,282 d.	113,752,618 d.	
EXPORTS.			
	1849.		1850.
Domestic, . . .	33,166,389 d.	33,227,676 d.	
Foreign, . . .	3,553,885	6,433,841	
Specie and bullion, . .	4,739,903	5,885,103	
Total, . . .	41,460,177 d.	44,546,620 d.	

The receipts for duties for the year ending the 30th June 1850 were 24,487,609 d., against 19,811,334 d. in 1849, and 20,839,680 d. in 1848. The aggregate commerce of the port for four years was as under:

	Imports.	Exports.
1846-7, . . .	82,593,625 d.	46,543,793 d.
1847-8, . . .	91,608,883	48,360,235
1848-9, . . .	89,425,282	41,460,127
1849-50, . . .	113,752,618	44,546,620
Total, . . .	377,440,408 d.	186,910,775 d.

The annexed table shows what proportion of the imports consists of what is called 'dry goods.' The figures below show the amount entered for consumption, and withdrawn from warehouse for consumption:

	1848-9.	1849-50.
Manufacture of wool, . .	9,488,690 d.	14,877,122 d.
— cotton, . . .	10,513,596	10,225,485
— silk, . . .	15,554,077	15,602,424
— flax, . . .	4,532,275	6,888,388
Miscellaneous, . . .	4,227,908	2,372,909
Total, . . .	41,916,546 d.	50,960,328 d.

It will be seen that nearly 45 per cent. of the imports is made up of dry goods. The following was the amount in value of goods entered for warehousing during these two years:

	1848-9.	1849-50.
Manufacture of wool, . .	1,257,163 d.	1,496,748 d.
— cotton, . . .	1,773,571	1,446,705
— silk, . . .	1,451,010	1,247,831
— flax, . . .	442,311	702,425
Miscellaneous, . . .	353,571	146,654
Total, . . .	5,257,626 d.	5,040,364 d.

The imports at New Y. in 1850 were within 4,000,000 d. of the entire imports of the country in 1844-45. A comparison of the aggregate exports and imports from New Y. shows that the imports at this port amount to 60 per cent. of the goods brought into the

country, and the exports to 32½ per cent. of the merchandise sent out of the country. The following summary of the value of imports and exports to and from New Y. shows, as compared with 1851, that the imports in 1852 declined 1,457,273 d., and the exports 16,606,449 d. The cause of this latter decrease appears to have been entirely owing to a change in the movements of specie, the exports of which were nearly 19,000,000 d. less than in 1851, whereas the exports of domestic produce show, it will be perceived, an increase of 1,554,006 d.

IMPORTS.			
	1851.		1852.
Free goods, . . .	9,636,967 d.		12,105,362 d.
Specie and bullion, . .	2,050,056		2,408,215
Dutiable goods, . . .	105,741,847		106,670,411
Dutiable merchandise, . .	13,880,022		8,667,641
Total, . . .	131,308,892		129,851,619
EXPORTS.			
	1851.		1852.
Domestic merchandise, . .	39,162,775		40,716,781
Foreign merchandise liable to duty, . . .	4,014,052		4,828,622
Foreign merchandise free of duty, . .	712,813		381,851
Specie and bullion, . . .	43,740,318		25,096,255
Total, . . .	87,629,958		71,023,509

[Shipping.] With regard to the shipping trade, the subjoined table shows the number of vessels which arrived at New Y. from foreign ports during 1852:

	Vessels.		Vessels.
American	2,300	Genoese	4
British	1,013	Mecklenburg	7
Bremen	125	Italian	9
French	18	Spanish	6
Austrian	9	Lubeck	2
Swedish	41	Oldenburg	17
Norwegian,	43	Columbian	1
Sicilian	19	Portuguese	23
Hamburg	48	Mexican	1
Danish	19	Venezuelan	4
Russian	14	Hanoverian	12
Belgian	20	Brazilian	3
Dutch	22	Bayarian	1
Neapolitan	4		
Prussian	34	Total	3,822
Sardinian	4		

COMPARATIVE STATEMENT OF ARRIVALS FOR

	1851.	1852.
Steamers, . . .	166	206
Ships, . . .	941	956
Barks, . . .	885	860
Brigs, . . .	1,305	1,253
Gallies, . . .	4	2
Ketches, . . .	2	—
Schooners, . . .	588	544
Sloops, . . .	1	—
Yachts, . . .	—	1
Total, . . .	3,888	3,822

The number of passengers which arrived by the above vessels was as follows:

	1851.	1852.
From foreign ports, . . .	310,335	12,158
From California, . . .	—	—
Total, . . .	322,493	—

The number of passengers for the last 12 years is given as under:

	1841.	1847.	1848.	1849.	1850.	1851.	1852.
1841 . . .	57,327	—	—	—	—	166,110	—
1842 . . .	74,949	—	—	—	—	191,900	—
1843 . . .	46,302	—	—	—	—	221,799	—
1844 . . .	61,002	—	—	—	—	226,287	—
1845 . . .	82,960	—	—	—	—	299,081	—
1846 . . .	115,230	—	—	—	—	310,335	—

The number of vessels which arrived and cleared from New Y. in 1850, with their tonnage and the number of seamen employed in them, was as follows:

ENTERED DURING 1850.			
Vessels.	Tonnage.	No. of seamen.	
American vessels, . . .	1,880	806,141½	27,540
Foreign ditto, . . .	1,451	441,718½	18,618
Total arrived, . . .	3,341	1,247,860	46,158
CLEARED.			
American vessels, . . .	1,463	699,617	24,263
Foreign ditto, . . .	1,355	406,453½	17,208
Total cleared, . . .	2,818	1,106,070½	41,471

By these returns it will be seen that considerably more than one-half the amount of tonnage employed in the commerce of New Y. is under foreign flags, of which two-thirds are British, and a similar proportion will be found in the other leading ports of the

United States. The annexed table shows the relative proportion of Foreign to American vessels employed in the trade of New Y. since 1821:

TONNAGE FROM FOREIGN PORTS.			
Year.	No. of Arrivals.	Tons American.	Tons Foreign.
1821	912	155,723	16,240
1822	1,172	203,032	23,707
1823	1,217	203,308	22,481
1824	1,364	236,080	16,689
1825	1,436	259,524	20,654
1826	1,389	246,174	28,822
1827	1,414	255,276	37,696
1828	1,377	236,308	39,308
1829	1,310	255,691	25,820
1830	1,489	280,918	33,797
1831	1,634	274,257	62,772
1832	1,808	295,293	106,425
1833	1,926	320,083	110,835
1834	1,932	352,225	96,670
1835	2,044	373,465	90,999
1836	2,285	407,095	149,634
1837	2,071	368,011	171,360
1838	1,790	377,563	91,320
1839	2,159	422,349	142,985
1840	1,933	409,458	118,186
1841	2,118	423,952	125,073
1842	1,962	406,623	148,591
1843	1,832	385,124	106,370
1844	2,208	438,074	155,298
1845	2,144	472,491	140,858
1846	2,292	456,761	185,404
1847	3,147	605,482	333,537
1848	3,060	657,794	367,321
1849	3,227	734,002	414,096
1850	3,341	806,141	441,718

Banks.] According to the *New Y. Courier and Enquirer*, the banks of the city of New Y. showed, at their quarterly statement in December, 1852—and it must be remembered that banking is regulated and controlled by the states in America, and that mercantile pursuits are encouraged by tariffs and other legislation—a capital of \$38,000,000 d., and liabilities to the extent of \$31,000,000 d.; while the bank of England, with £19,000,000 in its vaults, and £14,000,000 of national securities, shows only liabilities to the extent of £43,874,000; so that, in proportion to their resources, the banks of New Y. have about three times the liabilities of the bank of England. The city of New Y. possesses more than half the banking capital of the whole state, which, by the last quarterly return was \$65,450,000 d., with a total of liabilities for all the banks of the state of \$220,000,000 d. To meet this vast amount of liabilities there was only \$11,500,000 d. of specie in all the banks, and \$21,000,000 d. of what are called cash items, but which are not classed with specie. In the last quarter the increase of capital was nearly \$3,000,000 d., the increase of specie in the banks' vaults was \$1,500,000 d., and the increase of liabilities \$9,400,000 d. The *New Y. Merchant's Magazine*, a well-known authority, states that but one eminent merchant—and his death is still recent—has ever continued in active business in that city to the close of a long life without undergoing bankruptcy or a suspension of payments! In New Y. not 2 per cent. of the mercantile classes ultimately acquire wealth after passing through bankruptcy, and in Philadelphia the proportion is still smaller. According to *Palmer's Almanack* for 1849, there was in 1841—

Bankrupts,	33,739
Creditors,	1,049,603
Amount of debts,	446,934,615 dols.
Property surrendered,	43,697,307 ..

But on the property being realized, instead of a dividend of 10 cents. per dollar being paid, which this valuation would show, the proportion varied from 1 cent. in the southern district of New Y., to 13½ in the northern, being by far the largest dividend.

Progress of the city.] The following table shows the progress of the pop. and wealth of New Y.:

Year.	Population.	Value of real and personal estate.
1800	60,489	24,486,379 d.
1810	92,373	69,530,753
1820	123,706	69,530,573
1825	166,086	101,160,046
1830	202,589	125,283,518
1835	270,089	218,723,703
1840	312,852	252,843,163
1845	371,223	239,938,317
1850	517,849	256,217,093

City finances.] The receipts and expenditures of the corporation during the year ending 31st of December, 1852, exclusive of the fund set apart for the payment of the debt, were as follows:

Expenditure from Jan. 1, 1852, to Dec. 31, of the same year	8,294,241 d. 45 c.
Received from all sources for the same time	8,130,130 73
	164,110 72

Among the payments out of the treasury, and into it, the following are the most prominent:

	Expenditures.	Receipts.
Opening and paving streets	1,021,341 d. 82 c.	947,467 d. 90 c.
Common schools	653,935 06	40,621 53
Police	614,906 10	229 39
Alms-house	390,000 00	
Cleaning streets, and lamps, and gas	557,993 54	30,077 90
Street expenses	204,996 43	
Salaries	241,862 70	
Revenue bonds	2,368,970 00	2,933,755 00
Assessment bonds for paving streets	51,795 71	55,000 00
Docks and slips	294,986 29	5,784 25
From taxes	...	3,328,862 09
From money borrowed, payable by taxes and otherwise,	...	537,707 50

The expenditures and receipts on account of the City government, not including trust funds or the sinking fund, for the year ending Dec. 31, 1852, were as follows:

Expenditures,	3,116,793 d. 88 c.
Receipts other than from taxation	77,380 86
Balance payable from taxation	3,039,413 02

The great bulk of the city property, estimated at from 15,000,000 to 20,000,000 d., and the revenue thereon, which with the water-rent yield an annual income of nearly 1,000,000 d., are not included in the above statements. This property and these revenues are placed in the hands of certain trustees, and are pledged for the payment of the city debt, amounting on the 1st of Jan., 1853, to the sum of \$3,885,856 d. There are in the hands of the commissioner of the sinking fund, applicable to the payment of this debt, city stocks, and bonds and mortgages, amounting to the sum of \$3,896,266 d. 62 c.—Including the receipts and payments on account of the sinking fund for the payment of interest, and the sinking fund for the payment of the principal of the debt, the entire annual financial operations of the city government exceeded 10,000,000 d., viz.:

Received into the treasury	8,170,130 d. 72 c.
Received on account of sinking fund, for payment of debt	1,162,377 04
Received on account of sinking fund, for payment of interest	926,517 59
Total sum received	10,219,025 25

Expenditure	8,294,241 d. 45 c.
Expenditure on account of sinking fund, for payment of debt	1,116,337 60
Expenditure on account of sinking fund, for payment of interest	790,171 77
	10,200,750 d. 82 c.
	18,274 d. 53 c.

TOTAL AMOUNT OF THE CITY DEBT.

Besides the debt before given, of	13,885,856 d.
Reimbursable from the sinking fund, there is a debt for money borrowed to construct buildings, and for docks and slips, payable from taxation, of	1,005,000
Making a total debt of	14,890,856 d.

Schools.] The board-of-education, in the city of New Y., state that the whole number of schools within their jurisdiction, during the year ending 30th April, 1851, was 207, of which the schools of the public school society were 114; ward-schools, 72; corporate schools, 21; whole number of schools, 207. Among these were 17 schools for coloured children. The number of children taught, in 1850-51, was 107,568; in 1849-50, 102,874. The average attendance was, during the year ending Feb. 1, 1851, 40,955; during the year ending Feb. 1, 1850, 35,998. For the years ending

1848, and 1851, the number of schools, the whole number taught, the actual average attendance, and the aggregate cost of instruction for current expenses, were as follows:

1848.	Number of schools.	Number taught.	Aver. attendance.
Public schools	114	54,732	18,647
Ward schools	50	32,698	11,598
Corporate schools	18	2,169	1,878
Totals	182	89,599	32,123
Aggregate cost			201,176 d. 30 c.
Cost per scholar for 240 days' instruction			6 d. 26 c.
1851.	Number of schools.	Number taught.	Aver. attendance.
Public schools	114	53,239	19,273
Ward schools	72	50,539	18,716
Corporate schools	21	3,565	2,046
Totals	207	107,363	40,035
Aggregate cost			274,794 d. 39 c.
Cost per scholar for 240 days' instruction			6 d. 86 c.

[Criminal statistics.] The following is a statement of the amount of crime brought before the courts of the city during 1848 and 1849:

	1848.		1849.	
	Convict.	Acquit.	Convict.	Acquit.
Murder and other high crimes	2	6	7	4
Manslaughter and other misdms.	322	91	334	191
Special sessions	1,500	330	1,738	320

Sentenced to the state prison, in 1848—men, 119; women, 17; total, 136. In 1849—men, 135; women, 10; total, 145. Sentenced to the penitentiary, in 1848—men, 700; women, 170; total, 870. In 1849—men, 745; women, 131; total, 876. Sentenced to the city prison, in 1848—men, 162; women, 57; total, 229. In 1849—men, 274; women, 94; total, 368. Sent to the house-of-refuge, in 1848—boys, 98; girls, 3; total, 71. In 1849—boys, 70; girls, 5; total, 75.

[Climate.] The following meteorological observations were made at the New Y. hospital, in 1848 and 1850:

	Mean temp.		Highest temp.		Lowest temp.	
	1848.	1850.	1848.	1850.	1848.	1850.
January	34°	35°	56°	57°	5°	18°
February	32	35	52	60	11	11
March	38	37	64	65	13	19
April	50	42	73	79	35	30
May	61	55	85	79	47	42
June	70	69	89	86	48	50
July	74	78	85	89	53	62
August	72	71	83	84	61	56
September	62	65	83	81	41	45
October	54	54	77	71	41	37
November	49	48	59	65	25	31
December	40	34	58	55	21	16

The average range of the barometer, and fall of rain, in these years, was as follows:

	Average barom.		Fall of Rain.	
	1848.	1850.	1848.	1850.
January	30.01	30.04	2.64 in.	5.21 in.
February	29.86	29.96	1.46	2.48
March	29.95	29.88	1.73	5.51
April	29.98	29.92	1.15	2.19
May	29.82	29.84	6.13	7.91
June	29.86	29.98	5.78	3.36
July	29.95	29.95	4.01	4.63
August	30.03	29.96	2.22	5.91
September	29.93	29.99	2.45	5.57
October	29.93	29.92	6.16	1.75
November	30.02	30.00	2.25	1.40
December	29.99	29.97	6.87	4.48

42.94 50.46

In 1848, the fall of snow was 24 inches; in 1850, 11. The NW wind prevailed 97 days in 1848, and 102 in 1850; a SW wind 65 days in 1848, and 76 in 1850; a NE wind 56 in 1848, and 51 in 1850.

[Vital statistics.] In the year 1848 within a small fraction of 16,000 persons (15,919) were buried in the city of New Y. Large, however, as this aggregate is, it is not excessive, regard being had to the pop., nor indicative of any general insalubrity or special pestilence. Comparing the total number of deaths from disease with the estimated pop. of the city in 1848—450,000—the annual per centage is under 3.1-7th. The two most fatal maladies, according to the tables, were consumption and convulsions. Dysentery carried off 739, the chief mortality being in July and August; and typhus fever carried off 720, January, February, and March being the most fatal months. The tables of mortality bear out the statement that in the first 29 of the last 43 years, scarlet fever was nearly extinct in New Y., while measles and small-pox were of rare occurrence; whereas in the last 23 years, all these diseases have prevailed to an extent and in a mode which characterize epidemics. Since these diseases have been so prevalent the yellow fever has not appeared as an epidemic in New Y., nor in any place N. of Charleston.

NEW YORK, a village of Switzerland co., in the state of Indiana, U. S. 103 m. SE of Indianapolis, on the N bank of Ohio river.

NEW YORK MILLS, a village of Whitestown township, Oneida co., in the state of New York, U. S., 96 m. WNW of Albany, on Sadaquada creek. Pop. in 1840, 900.

NEW ZEALAND.

A group of three islands in the S. Pacific, 1,200 m. E of New South Wales, 5,000 m. from the Peruvian coast of S. America, and 13,000 m. from Great Britain, forming a long and comparatively narrow chain, the extreme points of which are 800 geog. m. distant from each other. They are comprised between the 34th and the 48th parallels of S lat., and the 166th and 179th meridians of E long. The northern and the middle islands are nearly of equal size, and their united territorial extent is nearly that of the United kingdom. The island to the S of Cook's strait has generally been called MIDDLE ISLAND, but by act of parliament in 1847, the name of NEW MUNSTER was conferred upon it; while the island to the N, generally known as NORTH ISLAND, was by the same act called NEW ULSTER; and the comparatively small island separated from the S extremity of New Munster by Foveaux's strait, till then known as SOUTH ISLAND or STEWART ISLAND, was called NEW LEINSTER.

[Historical notice.] It is supposed by some that New Zealand was visited by Juan Fernandez. He left memoranda stating that he had sailed westward from South America 30 days, when he reached a country inhabited by a people of a light complexion, clothed in a kind of linen, who treated him hospitably; and the natives have traditions of having been visited by Europeans long before the time of Cook. Further information on this subject may be found in Burney's *History of Discovery in the South Seas*. It is clear, however, that Abel Jansen Tasman first made known the existence of New Z. to Europeans. He saw it first on the 13th Sept. 1642, when he made the N extremity of the N. island, according to his latitudes; and running down the E coast of the N. island, he passed, through Cook's strait, into a bay on the N shore of the Middle island, not far from the present town of Nelson, which he called Murderer's bay from the circumstance of his losing 4 men in a conflict with the natives, who prevented him or any of his people from landing here. Tasman, supposing the land he had skirted to be a continuation of the supposed great southern continent,—the *Terra Incognita Australis* of the geographers of that day,—called it *Staatenland*, or 'the States country.' In the following year, however, another Dutchman of the name of Brower ascertained the insularity of this portion of land, which induced the States-general to exchange its former appellation for that of New Z., although there was no one point of resemblance between the old and new countries,—the latter being rugged, rocky, and mountainous, rising in several places to the height of the peak of Teneriffe,—the former without a rock, and as flat as the fens of Lincolnshire. A French navigator, M. de Surville, afterwards doubled Cape Otton or the North cape, and discovered Lauriston's bay; and Cook ascertained that the strait discovered by Tasman, and thought to separate an island on the N from a great southern continent, only separated two islands from each other. Cook surveyed a great part of the coasts of New Z. between the years 1769 and 1777. In March 1772, M. Marion du Fresne, a French navigator, came in sight of Cape Egmont, on the W coast of the northern island, to which he gave the name of Le Pic Mascarin; and

from this point skirted the coast towards the SE. D'Entrecasteaux fixed the position of Cape Maria van Diemen; and Vancouver completed the examination of the southern island, which had been placed 40 m. too far E in the first chart. To the authentic geographical information collected by Cook, in his first and subsequent voyages between 1769 and 1774, relating to the coasts and harbours of the North and Middle islands, little substantial addition was made for the next half-century. The English trade with New Z. is almost as old as the first settlement of Australia. The vicinity of New Z. was even one great attraction to Australia, for a high estimate had been formed by the discoverers, of the natural fertility of these islands, and the value of their timber and flax; and it was earnestly impressed upon the first governors of New South Wales, to find means of cultivating New Z. flax. The settlement at Norfolk island, a small uninhabited island two or three days' sail to the NW, was originally made, in 1793, from an idea that, being the nearest land to New Zealand, the plant might flourish there; and its first commandant was directed to procure one or more New Zealanders to teach the method of cultivating and dressing the flax. Meanwhile, sealing-expeditions had been fitted out by private enterprise to the Middle island. A shipwrecked crew spent a whole season near the S extremity of that island, and constructed a vessel to carry them to Sydney; and from this time the Middle island was frequently visited both for timber and seals. The information gained from the two New Zealanders brought to Norfolk island, encouraged the supercargo of a snow from India, at Sydney, to run into the Thames on the North island, and load with timber. His example was followed, and several experimental packages of flax were also taken off. After 1800 the intercourse thus established kept gradually extending, chiefly by means of whalers, whose frequent conflicts with the natives, however, tended to increase the general impression that New Z. was a land of savages and cannibals, irreclaimably beyond the pale of civilization. The Rev. Samuel Marsden, colonial chaplain at Sydney, had indeed conceived, towards the close of last cent., the benevolent scheme of establishing a mission in New Z.; but, owing to various hindrances, it was not till 1814 that he succeeded in landing the first missionary band on the Bay-of-Islands in the North island. Mr. Marsden's plan was taken up by the Church Missionary society; and in 1840 that body had 12 missionary stations N and S of the Thames, all on the E side of the North island. The Wesleyan missionaries commenced operations in 1823. In 1840 they had stations on the Hokianga and Kaipara, Manukau and Kawia, all on the W coast of the North island. The influence of the missionaries over the tribes in their vicinity soon became very great, and extended far beyond the range of their personal visitations. Encouraged by this, white settlers came to trust themselves with less of suspicion among the aborigines. A numerous body of shore-traders took up their abode in the vicinity of the Bay-of-Islands, the head-quarters of the Church missionaries; and a more select class acquired considerable property on the Hokianga, in the neighbourhood of the Wesleyans. In 1824, M. Duperrey touched upon the coast of New Z., during his circumnavigation of the globe; and in 1827, M. Dumont D'Urville, another French navigator, skirted the coasts of the North island. Settlements of a peculiar character also began to be formed about 1830 among the bays in and near Cook's straits. Originally they consisted of deserters from merchant or whaling vessels, or runaway convicts, who took native wives to insure the protection of some tribe, and disposed of their oil and bone

to chance vessels from Sydney. In due time some Sydney houses entered largely into this business, and by making advances of stores and other commodities to those adventurers, gave permanence to the enterprise and their settlements. Some parties of sealers formed similar settlements at the S extremity of the Middle island, and also on the South island. During one of the periodical droughts in New South Wales, supplies of maize were sought in New Z. among other places. The fertility of the Bay of Plenty led some Sydney speculators to establish permanent agents there to collect the crops; the same thing appears to have been done at Kawia and elsewhere. Until 1833, the islands of New Z., having no ostensible government, were considered by vessels of all nations neutral ground and free ports; but in that year some of the settlers at the Bay-of-Islands applied to the government at Sydney for protection against the outrages perpetrated chiefly by escaped convicts; and a British resident, on the civil establishment of New South Wales, was established in New Z., but with limited functions. In 1839, a lieutenant-governor was despatched from England; and in February 1840, a treaty was negotiated between that functionary and the native chiefs assembled at Waitangi, ceding to her Majesty all rights of sovereignty the chiefs possessed; guaranteeing, on the part of her Majesty, to the chiefs free and undisturbed possession of their lands so long as they desired to retain them; and imparting to the natives all the rights of British subjects. On the 21st of May 1840, the whole of the three islands were declared to be under the sovereignty of her Majesty, the queen of Great Britain. On the 3d of May 1841, New Z. was proclaimed a colony separate and independent from New South Wales. In 1841, the New Zealand company was established; and in 1847 it was constituted the government-instrument for the disposal of territory; but in 1850, the company resigned its charter and functions into the hands of government. The treaty of Waitangi, and others in succession, ceded the sovereignty of the northern island to the British crown, and secured to the crown the right of pre-emption in those lands which the chiefs might wish to alienate. The queen became paramount of the soil, but the *proprietors* remained with the chiefs. It was optional for them to sell or dispose of their property. In the language of the treaty, they were guaranteed "the full, exclusive, and undisturbed possession of their lands and estates, forests and fisheries." "But," the clause proceeds, "the chiefs of the united tribes and the individual chiefs yield to her Majesty the exclusive right of pre-emption over such lands as the proprietors may be disposed to alienate, at such prices as may be agreed upon between the respective proprietors and persons appointed by her Majesty to treat with them on that behalf." For all practical purposes, the treaty of Waitangi is the title by which the crown of Great Britain holds the sovereignty of New Z.—From its position, and numerous harbours, and well-protected bays, in a line of coast exceeding 3,500 m. in length, the group is admirably adapted for the trade of the whole Southern Pacific, from Torres' straits to Tahiti, and as a naval station, to command the whole archipelago clustering between these points. Nor is the importance of New Z. solely owing to its position. Its climate is genial; its soil, with moderate labour, fruitful; its forests abound with a variety of fine timber; its flax has become to a large extent a cheap substitute for Russian hemp; its wool is becoming an article of export; and the produce of its agriculture, mines, and fisheries, is annually increasing. Still it must be borne in mind, that New Z. can only be rendered a wealthy and prosperous colony

by great labour and at much expense. It has neither a tropical climate, nor is it a country in which edible vegetables and fruits grow spontaneously and abundantly, neither is it inhabited by native animals adapted for the food of man. Its mountains are still covered with dense forests; and its plains and lowlands throughout much of their extent with impenetrable high fern and shrubs, or with swamps and marshes. To develop its natural resources, or create new ones, must be the work of time and energy. "Only a laborious peasantry," says Dr. Dieffenbach, writing in 1843, "can render the colony, in time, an entrepot of commerce, a depot for transit-trade, and a manufacturing country,—none of which it is at present."

I. NEW ULSTER, or EAHEINOMAUWE, has its N extremity in a peninsular projection, the NW extremity of which is Cape Maria Van Diemen, discovered by Tasman in 1643, and the NE, Cape Otou or North cape. Cape Maria Van Diemen is formed of detached rocks of a hard conglomerate; and inland of this promontory the peninsula presents sandy hills of a dazzling whiteness, separated by swampy valleys mostly covered with rushes of the genus *typha*. North cape is high and bold; but is separated by a flat swampy belt of land from the hills at Kapowairua, which attain an alt. of 1,130 ft. Off North cape lies a small rocky island called Muri Motu or 'Lost island.' About 40 m. to the W of North cape are the Three Kings, a cluster of conical pinnacled rocks. To the parallel of $37^{\circ} 40'$, the island has a NNW and SSE direction, and nowhere exceeds 70 m. in breadth; but at the bottom of the Bay of Plenty it stretches out towards the E, and assumes a breadth of nearly 200 m., which it retains to the parallel of 39° , its general direction however being changed to NNE and SSW. From 39° S lat., the S extremity of the island Cape Kawa-Kawa, or Cape Palliser, in S lat. $41^{\circ} 37'$, it gradually contracts in breadth to about 50 m. Its total area has been roughly estimated at 38,000 sq. m.

[Northern extremity.] Tracing the E coast of this insular division of New Z. from North cape to Cape Palliser, we meet with the shallow inlet of Sandy bay on the E side of the narrow peninsular extremity of the island. Then follows the larger and deeper inlet of Lauriston bay, or Manganui bay; to the S of which the coast-line trends eastwards to Wangara harbour, the scene of the massacre of the Boyd's crew in 1809. About 25 m. to the SE of Wangara lies the Bay of Islands, one of the finest harbours in New Z. Half-way between the Bay of Islands, and the bottom of Hauraki gulf, lies Wangari bay. The scenery of all this coast is that of a broken rugged country overspread with a dark and sombre but luxuriant vegetation. Hauraki or Waibo gulf, has an entrance of 40 m. wide between Point Rodney on the N, and Cape Colville on the S, and has a length of 70 m. to the mouth of the Thames river. The latter cape is the extreme point of a long promontory formed by a chain of wooded hills with a sharp crest and steep sides, at the base of the western slope of which runs the Waibo or Thames river. This chain, known as the Ahora mountains, is continued to the southward along the E coast.

[Auckland, and the valley of the Thames.] The valley of the Thames is about 100 m. in length, extending to the neighbourhood of Lake Roturua. The frith presents several finely wooded islands, and several harbours, the most important of which is that of Waitemata, or Auckland, 40 m. distant from Point Rodney in S lat. $36^{\circ} 51'$, E long. $174^{\circ} 45'$. The river and harbour of Waitemata are shut in from the passages leading into the estuary of the Thames

by the islands of Waiheke, Motu-Tapu, and Rangitoto. The first lieutenant-governor fixed on the shores of the Waitemata for the site of the future capital of New Z., influenced in this choice by its central position, its facility of internal water-communication by the Kaipara northwards, and by the Manukoa and Waikato southwards, and by the fertility of the soil. The distance across the island from Auckland to the head of Manukoa harbour, an inlet on the W coast of about 15 m. in length, and 8 m. broad, is only 7 m. The physical characteristics of the country around Auckland are thus sketched in a native publication of the year 1843: "The country in the district of Auckland is of that undulating character which marks the lower series of the secondary sandstone formations, with tablelands and corresponding valleys; so that the sections formed by the shores of the estuaries and rivers which indent it—the Waitemata, the Manukoa, the Tamaki, and part of the gulf of Hauraki—present a succession of argillaceous sandstone cliffs of different heights, with intervening bays receding inland—the country lying between these great estuaries varying in breadth from 15 m. to 3 m., and at the portage of the Tamaki only $\frac{3}{4}$ m., affords over its surface flats of considerable extent and declivities practicable for agriculture, the bottoms being always occupied by a small stream—generally bare of wood, or covered with patches of small-sized trees suitable for fuel or fencing—and rising in gentle elevations to the mountain-ranges to the west and south, which are of a different geological formation, and are universally covered with forests of gigantic trees. In various parts of the above-described tract, hills shoot up in the form of truncated cones of various elevations, the highest about 500 ft., which are the remains of extinct volcanoes, each having a well-defined crater and a base of some extent, covered with loose fragments of vesicular lava and scoria, or immense masses of more compact lava cropping out at various points, the interstices, however, permitting the growth of a variety of shrubs and trees. The whole of the above-mentioned country, with the exception of the volcanic land, is well watered by natural streams, and water can be procured at all times in abundance by means of wells. About one-half of this district, consisting of undulating ground, is covered with fern and various shrubs, chiefly the *tupaki*, and possesses a soil of a rich yellow clay mixed with sand and charred vegetable matter, owing to the frequent burning of the fern, which, when broken up and exposed to the air, soon pulverizes into a fine rich loam, varying in depth from 1 to 2 ft., easily laboured; but, from the excellency of the subsoil, it may be cultivated to any depth required. The subsoil consists of a red and yellow clay, mixed with ferruginous sand. The substratum is formed of a soft blue and yellow argillaceous sandstone. One-fourth of the district presents a more level surface, being covered with dwarf *manuka*, fern, and a variety of small shrubs and tufts of grass. Its soil consists of a whitish clay mixed with sand, more adhesive than the former, yet, when broken up and exposed, soon pulverizes; the subsoil white clay and red ferruginous sand, substratum the same as the former. It is not so rich as the first-mentioned soil. The remaining fourth may be considered different from either of the former, being generally situated near the volcanic hills of a varied surface, the hilly portion being covered with fern and grass. The soil consisting of a dry red volcanic formation to a great depth, the greater part covered with scoria, and where it is only on the surface, the soil is a rich red loam, very fertile; another portion, covered with trees and shrubs, shows a rich mould of a volcanic nature to a depth

of several feet, mixed with red sand and small calcined stones, resting upon a substratum of concrete. Another small portion lying along the banks of freshwater creeks, covered with evergreens and tree-ferns, affords a rich friable clay, mixed with ferruginous sand, resting on a substratum of a soft yellow and red ferruginous sandstone. It is thus seen what a variety of soils are offered to the agriculturist, each adapted to some particular production, and favourable to some peculiar mode of agriculture." The first English merchant vessel that anchored in the Waitemata was the barque *Platina*, on 13th Sept. 1840. At that period there was not a single European located on the shores of this harbour. See article AUCKLAND. In the lower part of the great plain of the Thames, the soil is clayey and little elevated above the mean level of the tides; but at the distance of 30 m. from the mouth of the river, the plain becomes dry, and is in many places ready for the plough. The elevated mountain-ranges on either side of this great plain consist of the unstratified classes of rocks which predominate in New Z., viz. greywacke, basalt, trap, and pumice.

South-east district. A level tract from 4 to 8 m. wide, presenting a soil of pumiceous gravel, skirts the extensive embayment of the Bay of Plenty, which presents several fertile islands, and one small low island, about 6 m. in circuit, called White island or Puhia-i-Wakari, which contains an active volcano, and yields considerable quantities of sulphur. At dusk the flames issuing from its crater are visible, and a white cloud resting above it usually marks its position in the horizon. The extreme eastern part of the North island is formed by a broad peninsula which divides the Bay of Plenty from the large islet on the E coast called Hawke bay or Wairau. Little is known of the SE portion of the island, with the exception of the coast line, which from Cape Mata-Mawi, the S extremity of Hawke bay, trends SSE in a high unbroken rocky line to Cape Palliser, at the entrance of Cook's strait; but the interior is known to be mountainous, and high ridges cross the island from Cape Mata-Mawi towards Cape Egmont on the W coast.

Valley of the Wairarapa. The magnificent valley of the Wairarapa, which opens upon the SE coast of Cook's strait, contains about 500,000 acres of plains and down, and is bounded on either side by mountain-ranges affording admirable pasture. The northern or upper portion of this valley or rather series of valleys, is traversed by the head waters of the Manawatu, which flows through what is called 'the Gorge' in the great dividing range, and enters the sea on the W coast of the island; it is also watered by various streams which flow towards the E coast. Its lower portion is separated from the E coast by the Haurangi, Maungaraki, and Puketois ranges, which extend in a line parallel with the coast and at the distance of 8 or 10 m. from it. At the S end of the valley are two shallow lagoons covering an area of about 50,000 acres and surrounded by low swampy land, but having no entrance seaward. The mouth of the Wairarapa valley is open to the SW, but throughout the greater portion of its extent it is well sheltered by high ranges on the E and W, and enjoys a delightful, equable climate.

Port Nicholson and Wellington. The high lands of Baring head, about the centre of the N coast of Cook's straits, divide Port Nicholson from Palliser bay. Two mountain-ridges which diverge at the source of the Hutt or Eritongo river from the main dividing ridge, there called the Tararua range, enclose Port Nicholson, a lake-like bay 9 m. in length by 5 m. in breadth, and the valley of its river. The land stretching on both sides of the Hutt is of

great fertility. The harbour presents two deep bays, one of which, called Lambton harbour, forms the port of Wellington. The snowy peaks of the Tararua mountains form a prominent object in sailing down Cook's strait. The range extends towards the centre of the island, where it is connected by the Rua-Wahine range with the group of the Rua-Pahu and Tongariro in the district of Lake Taupo. The district of Wellington is a tongue of land averaging about 90 m. in length from N to S, by 60 m. in breadth, and containing about 3,456,000 acres, of which fully 2,000,000 are susceptible of cultivation. That portion of the district which lies to the W of the great dividing ridge and N of Cook's strait is well watered by the rivers Tarakina, Rangitikei, Manawatu, Ohau, Waikawa, Otaki, Waimea, and Waikanae. At the N extremity of this district, the foot of the Ruahine range is between 20 and 30 m. from the sandy beach of the W coast of the island. This distance remains merely the same as far S as 'the Gorge,' where the Manawatu river breaks through the dividing range on its way to the W coast; but from this point southwards the dividing ridge, here called the Tararua, bends more to the W. The country rises slightly from the coast to 4 or 5 m. inland, and with but few exceptions consists of open grass or of fern land interspersed with swamps and marshes; beyond this it becomes undulating and covered with wood; and the forest extends almost invariably to the summit of the dividing ridge.

Taranaki district, and New Plymouth. The Taranaki country, so called from the native name of Mount Egmont, but to which English settlers have given the name New Plymouth, occupies that portion of the W coast of the North island where the coast-line, after sweeping round the broad headland of which Mount Egmont occupies the centre, trends towards the E. The settlement of New Plymouth is in S lat. 39° 1', E long. 174° 15'. It possesses an equable climate and fertile soil, so much so as to be regarded by some as the "garden of New Z." Its soil, Mr. Hursthouse says, "a light friable loam, with a porous subsoil, is divided locally into three sorts, each marked by a different vegetation. The first is but a strip, extending along the coast, covered with light fern, interspersed with tufts of grass, and freely mixed, especially nearest the shore, with the black iron sand which is so plentiful here. The productive powers of this sand are rather surprising. Almost on the beach, within 60 yds. of high-water mark, some early emigrants formed a few rough gardens, which produced excellent crops of vegetables; and, strange as it may seem to an English farmer, upwards of 16 bush. of wheat have been obtained from a quarter of an acre of nearly the same description of soil. The second division, adjoining this, is a tract of great extent covered with fern 6 to 8 ft. high, intermixed with a small bush called *tutu*, and a species of tall grass called *toi-toi*. The surface is a vegetable decomposition of from 7 to 10 inches, matted together by the fern-root, with a light, yellow subsoil of many feet in depth, entirely free from stones, shells, gravel, or clay. The principal farms are on this land; and it may here be observed that the chief difference, as respects the cultivation of this soil and the preceding, is, that it requires more exposure before cropping. The third division is the bush, or forest-land, which joins the fern, and extends along the country in a rather irregular line, 2 to 5 m. from the coast, and a considerable distance back into the interior. This soil in appearance resembles the second description of fern-land, but turns up quite mellow, and is for cropping at once." Away from the small block of cultivable land stretch various grassy plains, the nature and extent of which is as yet but little known.

Mount Egmont or Taranaki is the W extremity of a volcanic region which traverses the island from SW to NE, terminating on the shores of the Bay of Plenty, in which, as already noticed, is an active volcanic island. It is distinctly visible from Tongariro, bearing W by S, and offers a good landmark to vessels approaching Cook's strait from England.

From the river Waitera, northwards to the Mokau, the shores are elevated, and mostly consist of marl and a stiff blue clay. The country immediately inland is undulating in surface, and overgrown with fern; and further inland rises into low hills of gentle declivity and rounded summits. Proceeding northwards from the Mokau, the shores as far as the mouth of the Manukau present in some places a low sandy beach, and in others are lined by sand-hills; inland, the country rises into mountains of from 1,500 to 2,000 ft., which to the S of the parallel of 38° arrange themselves into a continuous ridge, the northern extremity of the great dividing range, which, under the name of the Rangitoto mountains, begins with Mount Pirongia, alt. 2,428 ft., and extends S by E to Tongariro-peak, alt. 6,200 ft., and thence S to Ruapahu, alt. 9,000 ft.

Basin of the Waikato. The Waikato, the largest river of the North Island, rises on the N declivity of Mount Tongariro, in Lake Rotunairo, at an alt. of 1,700 ft. above sea-level; and running N, enters Lake Taupo, from the NE extremity of which it issues with a deep stream 300 yds. wide, and runs NNE to the parallel of 37° 30' S, when it turns NW, and receives the Waipa; it then turns SW, and falls into the sea after a course of about 250 m. Lake Taupo is about 36 m. in length by 25 m. in greatest breadth, and is situated about 12 m. N of Mount Tongariro, at an alt. of 1,837 ft. above sea-level. It is hemmed in by perpendicular cliffs of enormous altitude. A considerable portion of the country around it consists of level table-lands.

II. MIDDLE ISLAND, or TAVAI-POENAMMOO. The Middle island of New Z. is separated from the Northern island by Cook's strait, which is about 130 m. long, and has a general direction from S by E to N by W. The extreme S points of this strait are Cape Kawa-Kawa on the North island, and Cape Campbell on the Middle island, which are about 50 m. distant from each other. Its extreme N points are Cape Egmont on the N island, and Cape Farewell on the S island, which are 100 m. distant. It is of very varying breadth, and between Cape Terawiti and Wellington-head is only about 17 m. It contains several islands, the largest of which, Kapiti or Entry island, is about 8 or 10 m. in length, by 2 or 3 m. in breadth, and consists of steep forest-clad hills.

The Middle island extends from 40° 25' to 46° 40' S lat., and lies between the meridians of 166° and 174° 30'. Its area has been roughly estimated at 50,000 sq. m. That part of it which borders on Cook's strait was the only part of it known to be inhabited even by natives a few years ago. It is covered with high mountains, which attain an alt. of 3,000 ft. at a small distance from the shore, and are supposed to support a table-land in the interior. Three extensive masses of mountains terminate on Cook's strait, enclosing comparatively narrow valleys between them. These three masses are supposed to branch off from the N extremity of a chain of lofty sharp-peaked mountains which appears to extend from NE to SW through a considerable part of the island, the highest peaks of which attain the region of perpetual snow in this lat., or about 8,000 ft. The Kawatiri or Buller river descends from it towards the W coast; the Motueka towards Blind bay, in Cook's strait; the Pelorus to Queen Charlotte's sound;

the Wairau, the Waiopai, and the Awatere, to Cloudy bay.

Nelson and Wairau district. The E coast of Blind bay, on Cook's strait, consists of a series of high bluffs till within 10 or 12 m. of the bottom of the bay, where they cease, and the shore assumes a less abrupt appearance, but still rises to a considerable elevation at a little distance from the water's edge. At the point where the high bluffs cease, a singular bank of boulder-stones detaches itself from the main land, and at the distance of about a $\frac{1}{2}$ m. runs parallel with it for 8 or 9 m. nearly to the bottom of the bay. The space between this boulder-bank and the mainland for the first 2 m. is filled by a flax swamp of about 800 acres, which, from the quantity of roots and dead timber buried in it, has evidently at one time been covered with a dense forest. Below this swamp commences a mud flat, which extends for about 5 m., and is covered with water at high tide. The last $\frac{1}{2}$ m. between the boulder and the main forms the harbour, at the head of which the town of Nelson stands, and in which there is water for vessels of 500 or 600 tons, shelter in every wind, and excellent holding-ground. The boulder-bank at its termination again approaches the main to within about 200 yds., forming by its curve a fine bight equal to a wet dock, in which vessels can be laid ashore on a smooth beach and floated off again for purposes of repair or examination. Between the end of the boulder-bank and the main stands the Arrow rock, 50 or 60 ft. high; and between this rock and the boulder-bank is the narrow though not dangerous entrance of the harbour. The formation of the boulder-bank is curious, and has afforded a good deal of speculation as to its origin. The lat. of Nelson harbour is S 41° 15', E long. 173° 16'. It can only be entered on the flood-tide, the ebb running too strong to allow of it. The rise and fall of the tide is 12 ft. It was thought necessary to include other places than Blind bay to obtain the quantity of land required for the Nelson scheme; Massacre bay on the W, and for a few years Cloudy bay on the E, were taken into the limits of the settlement. The connection between these districts is by no means easy, and will eventually give them the character rather of three settlements rather than one. Massacre bay was formerly only accessible from Nelson by sea, the distance being about 50 m.; but there is since gold was found, a road over the hills which separate it from Blind bay. The greatest defect of Massacre bay is the absence of a good harbour, the rivers which exist in it only affording access for the smallest vessels; and though there is a tolerable roadstead behind the islands of Tata, it is from 4 to 6 m. from the best part of the land where shipping operations would be required. The district is a pleasing one; the greater portion is heavily timbered, and the land extremely good. Gold, coal, and lime are both accessible at the surface on the bank or near the margin of the Motupipi, and can at once be put on board vessels of 15 or 20 tons. The gross amount of level land in this bay is estimated at 45,000 acres, of which at least 25,000 are fit for agriculture. Blind bay contains about 60,000 acres of land sufficiently level for agriculture; but not above one-half of this is of a quality adapted for that purpose. It is generally free from timber, but covered with fern; and with flax in the swampy parts, forming a margin a $\frac{1}{2}$ m. deep on the S and E, near the sea.—Cloudy bay, with the Wairau plain and valley, formed at first the most extensive and most valuable portion of the settlement. This district forms a broad level plain, 8 or 10 m. wide at the head of Cloudy bay, running inland for 18 m., when it suddenly converges to a width of 2 or 3 m. equally level with the plain below

and extending from 40 to 50 m. further inland. Though it may in a general description be spoken of as level, there is a considerable but gradual fall from the head of the valley to the sea, probably not less than 2,000 ft. in 50 m. The land for 4 or 5 m. from the sea is covered with flax and other strong vegetation, and is generally swampy, but of excellent quality, and capable apparently of easy drainage; for the next 8 or 10 m. it is dry, covered with long grass, and generally of good quality; beyond this it continues grassy, the land getting lighter the further you advance up the country, till the last 16 or 18 m., which are very poor and stony, only fit for grazing purposes. At the very extremity there are a few miles of forest. The whole dist. contains abundance of excellent agricultural land; but its principal value at present is to be found in the fertile pasture with which it is clothed from end to end, including the whole of the hills which bound it on the E side, which present some of the finest sheep-runs in the world, and extend all the way to the E coast by Cape Campbell, and S to the Kaikora mountains or Central ridge.—Connected with the Wairau on the E are the Wakefield downs or Kaipara-to-hau, a district similar to the Wairau, but containing only about 20,000 acres. The whole contents of the Wairau and Wakefield downs are about 200,000 acres of level land. Of this about two-thirds are fitted for agriculture. In 1859 the Wairau, Pelorus, and part of the Amuri districts were constituted the province of Marlborough, with Picton for its chief town. There is not at present any very easy connection between Blind bay and the Wairau. A heavy mountain-ridge, altogether impassable except in three places, divides the two. The easiest of these is 75 m. by road from Nelson, enters the upper part of the Wairau valley at a point 60 m. from Cloudy bay, making the whole distance from bay to bay 135 m. It is called the Wairau gorge, and being connected by a public ferry over the Wairau river with the saddle of Clarence and Jollies pass, constitutes a communication inland between Nelson and Canterbury provinces through the new prov. of Marlborough over the Leslie hills. The two other passes are nearer the seaboard and of considerable difficulty. The one commencing near that of N. may become soon available. The climate of the northern district of the Middle island is salubrious. With a great amount of sunshine, the heat is never excessive nor ever disagreeable; while, with an abundance of rain, there is no continual wet season. The wind, though for about three months in the spring and summer it blows fresh for days together, is seldom violent or tempestuous. In winter it blows little; days and even weeks almost perfectly calm, with brilliant sunshine by day, and magnificent moonlight at night, occur at that season. The sheep frequently lamb in mid-winter in the open country; and unless there happens to be an unusually heavy rain or severe frost at the time of lambing, a very small percentage of losses is sustained. Geraniums, fuschias, anemones, piceetes, and other summer-flowers of England, continue to blossom in Nelson during the winter-months. One peculiarity of the climate is, that there are in fact only two seasons, summer and winter; there are no transition-seasons of spring and autumn; and their absence is the more observed from the fact that nearly all the indigenous trees are evergreen, so that there is no periodical fall or renewal of the leaf.

Port Underwood, situated to the S of Cook's strait, forms the natural outlet for the produce of the great Wairau plain, or the SE part of the Nelson settlement. As no harbour exists between Port Underwood and Banks' peninsula, the N half of the

whole country lying between these two points may be considered as the natural appendage of the former; and its accessibility without the necessity of entering the strait would be a circumstance, if not counterbalanced by others, greatly in its favour. Another advantage of position enjoyed by Port Underwood is its vicinity to the whaling-grounds, for the shore-parties to run to. This circumstance made it in former years a favourite harbour for the whale-ships themselves; but of late years each whaling season has been getting worse than the preceding ones at Port Underwood. The entrance to Port Underwood is wide, and unobstructed by rocks, reefs, or shoals; but this advantage, as well as those we have been considering, are greatly reduced in importance by the difficulties of ingress and egress caused by the winds which generally blow on all this part of the coast. "The prevailing winds in Cook's strait," says Capt. Chaffers, "are NW nine months out of the twelve; in the winter-months, June, July, and August, blowing in heavy gales, and shifting round suddenly to the opposite point." All the reports of the residents in Port Underwood tended to show that this description is equally applicable to the winds in Cloudy bay. The NW winds blow nearly directly out of Port Underwood, and whenever violent prevent all ingress; while the opposite winds, the south-eastern, which divide the year with the north-western, whenever they are heavy, make it equally difficult for vessels to get out. Port Underwood divides itself into two arms at the upper or N part. The shores of the main harbour, and of both of these arms, may be described as consisting of a succession of coves formed by spurs from the mountains, descending into the harbour and its branches at nearly right angles to the direction of the latter. As the prevalent winds are nearly up and down the harbour, these spurs of course afford on one side or the other shelter from each wind in turn; but these coves are all of them of small extent. Next in importance to the communication of a port with the outer seas, and its general goodness as a harbour, is that of its communication with the interior of the country. Between Port Underwood and the Wairau districts there is one such communication by water, and one by land. You may send produce down the Wairau river to Cloudy bay, and so to Port Underwood, the distance being 10 m.; but the river has a bar across its mouth, which makes this an operation not to be risked with any wind but one off shore. The communication by land presents nearly equal difficulties. The hills which bound the Wairau plain on the N, turning off almost at right angles, are continued till they form the W side of Port Underwood, leaving a space of 6 m. between the plain and the port, where their bases are washed by the sea. Along the whole of this distance, with the exception of two places, where they recede and form two small coves, open to the SE, their declivities are abruptly cut off seaward into craggy cliffs and broken rocks hanging over and jutting out into the sea, and split and shattered into every variety of ruggedness. A road by the sea-coast may be, therefore, considered as out of the question. The inland path runs from the plain over the spurs between the coves just mentioned, and descends to the sea-coast in each of them; but the hill-spur requires steps cut in the footpath here and there, which will give a tolerably correct idea of its steepness.

If Queen Charlotte's sound is not so well situated as Port Underwood, as the natural outlet for the produce of the country S of the straits, it has in the same degree the advantage of Port Underwood, as an inlet for the products of foreign countries. The only part of what can properly be considered the

straits which it is necessary to sail through to reach Queen Charlotte's sound has this peculiar advantage, that its W coast is formed of a close succession of deep, safe, and easily-accessible harbours,—Port Hardy, Admiralty bay, Port Gore, and the sound itself, the wide mouths of which, like the spaces between the opened fingers of a hand, lie almost at right angles to the direction of the prevalent winds, so as at all times to afford the readiest shelter from both. The position of Queen Charlotte's sound with reference to the opposite coast of the straits,—the S coast of the Northern island,—is a circumstance greatly in its favour. There is no harbour from Wellington all round the coast to Hokianga. The water-communication will be easier between the whole of this coast N of Porirua and Queen Charlotte's sound than between the same coast and Port Nicholson itself. For facility of ingress and egress, Queen Charlotte's sound is well known to yield to few harbours in the world. The only circumstance that makes any particular caution requisite is the set of the tides; but as the entrance is 9 m. wide, this is a difficulty easily avoidable. The harbour at Waitohi, or Newton bay, is from 20 to 25 m. from the entrance. In the words of Cook, however, "it is at the entrance 3 leagues broad, and is a collection of the finest harbours in the world." The tides in the sound, says Captain Chaffers, "are regular, the soundings from Montuara island at the mouth gradually deepen from 7 and 8 to 30 and 35 fath. mid-channel. The shores on both sides are bold, and may be approached with safety to one cable's distance." The water continues deep almost to the head of the sound, and its width diminishes very gradually. It is 2 or 3 m. wide for the most part, between the south end of Tory channel and Newton bay. "On the whole," says Colonel Wakefield, "considering the position and capabilities of Queen Charlotte's sound, whether with a view to its becoming a port for homeward-bound vessels to take in cargo, and provisions, a safe channel of communication between the W part of the straits and Port Nicholson, and the E coast, or as a situation for docks and ship-building, it is of the first importance, and cannot be spoken of in too high terms." The harbour is connected with the plain of the Wairau by a pass through a valley which is densely wooded for the first 8 or 9 m. The path crosses some slopes which can scarcely be regarded as more than undulations, and indeed would hardly render incorrect a description of the whole pass as an almost level one. Beyond the wood, the valley takes a winding course into the plain, and consists of an unbroken flax and ranpo swamp. Little is requisite to connect Waitohi harbour with the Wairau plain and the districts immediately to the S of it. For a town site, the land at the head of this bay presents all the requisite capabilities. A cove, which it has been proposed to call Milton-bay, lies a little to the NE, separated from it by a narrow neck or peninsula of hills, joined to the main land by a level isthmus. The level spreads round the heads of both bays, running about 3 m. in length, by a $\frac{1}{2}$ m. in breadth, from the top of one bay to that of the other, and losing itself in the Waitohi and Tua Marina pass. There is, in fact, one extensive town-site abutting on two bays. Milton-bay is in itself also an excellent harbour, though more open to the sound than the other; the soundings are as regular, the water generally as deep.—The harbour selected as the site of the port to the Wairau district it is proposed to call Newton-bay; that to the E of it, Milton bay; that to the W, Shakspeare-bay. The two projecting headlands, between which lie the two bays to the W, have been named respectively Point-Raffles and Point-Metcalf; the

middle point between them it is proposed to call Point-Napier.

North-eastern coast.] From Cape Campbell to Port Victoria, a distance of about 100 m., the coast trends SSW; and presents the embouchures of several streams, amongst which are the Waipapa, the Waipou, the Hurunui, the Ashley, and the Courtenay. The surface of the country consists in general of grassy plains, stretching from the coast to the foot of the mountain-range which lies about 10 or 12 m. inland. At Kaikora, in about $42^{\circ} 30' S$ lat., there is a low point of land which may afford shelter to small vessels; but there is no harbour for large shipping between Port Underwood in Cloudy bay and Port Victoria on the N coast of Banks's peninsula. The SE point of the peninsula is in S lat. $43^{\circ} 52' 15''$, E long. 173° . The peninsula is a mass of steep rugged hills, chiefly clothed with wood, and covered with a poor clayey soil. The mainland is low and level at the back of the peninsula, which has probably been an island at no distant geological period.

Canterbury settlement.] A society having its headquarters in London, purchased a large block of land from the New Z. company in the neighbourhood of Banks's peninsula. The district in which the settlement is situated is nearly intersected in its centre by the 44th parallel, and contains over 2,500,000 acres, extending coastwise to the N and SW, and bounded inland by a range of hills whose distance from the coast varies from 40 to 50 m. This country is perfectly level, watered by numerous rivers and streams, and covered with grass. Portions of it are of inferior quality; a very small part is swampy; and the surface in some parts is stony; but much of it is well-adapted for agricultural purposes, and capable of yielding excellent crops of all kinds of grain, potatoes, and European fruits and vegetables; and the whole of this tract of plain country affords excellent natural pasturage, and is well-adapted for depasturing cattle and horses. The produce of a very extensive country, extending along the sea-coast for 200 or 300 m., will have Port Cooper—now Port Victoria—as its market and harbour. Banks's peninsula contains four good harbours, namely, Akaroa, Pigeon-bay, Port Levy, and Port Victoria. The country is hilly and well-wooded; and the three former harbours are separated from the plain country, so that Port Victoria alone is of value with reference to the plains adjoining. The harbour of Port Victoria, situated in the NW angle of Banks's peninsula, though open to the E, affords good and safe anchorage; large ships anchor about 4 m. up, whilst brigs and large schooners lie off the port-town of Lyttelton. The settlement consists mainly of three grassy plains or prairies, named Sumner, Whately, and Wilberforce, intersected by several rivers, with their numerous tributaries, running to the sea from an Alpine chain of snow-capped mountains. All along the spurs and foot of this range, the forest—of which the plains seem to have been stripped by fire—extends in primeval grandeur. The capital of the settlement is Lyttelton on Victoria harbour, in S lat. $43^{\circ} 35'$, which, as respects temperature, corresponds with about 47° in the N hemisphere, or that of the most pleasant spots in the S of France. The climate exactly resembles that of Tasmania, being chiefly remarkable for warmth without sultriness, freshness without cold, and a clear brightness without aridity. Both the grape, for which England is too cold, and the gooseberry, for which the S of Italy is too hot, here come to perfection. In consequence of the scale of the natural features of the country, the scenery is beautiful, and in some places magnificent. The prairie character of the main part of the territory, together with the dryness of the atmosphere

and the mildness of the winter, indicates that the most suitable occupation for capitalists will be pastoral husbandry. As respects flowers, kitchen-vegetables, and all the English fruits, with the addition of melons and grapes, the gardens of the French settlers at Akaroa, and of the squatters on Sumner plain, are described as teeming with produce of the finest quality and most beautiful appearance. Sea-fish is abundant, various, and of excellent quality. The only wild quadruped is swine; they are numerous, are very good to eat, and afford plenty of hard sport. The plains abound with quail, and a variety of wild-fowl. There are no snakes, wild dogs, or other indigenous vermin. The surveying officer of the ship *Acheron*, writing in May 1849, says of this district: "You know, of course, that the general feature of the country is a succession of abrupt and lofty hills, with corresponding deep and secluded valleys, either thickly wooded, or clothed with a thick fern and long grass, offering all kinds of obstacles both for pastoral and agricultural purposes; but here we have a plain extending from N to S 100 m., with an average width of at least 30 m., intersected by numerous rivers, not the water holes of Australia, but rather rushing torrents, which have managed to excavate beds for themselves some 200 or 300 and 400 ft. in a perpendicular drop, on the W side of the plains: these rivers will, I anticipate, on a detailed examination of their entrances being made, offer but few obstacles to boat navigation for some half-dozen miles from the sea-board. This great plain may be called almost a dead level for as far as the eye can trace from any point. From the sea-shore to the Backbone ridge, not a rise of 20 ft. meets the view; but judging from the excavated bed of the rivers and other circumstances, I think there will be found a gradual rise of the land, from the coast to the base of the mountain-range, where it may be some 500 ft. above the level of the sea." See article CANTERBURY.

Otago settlement.] About 150 m. S of Banks's peninsula, and near the S extremity of the middle island, lies another 'clan settlement,' extending from S lat. 45° 40' to 46° 20', between the mouth of Otago harbour and a headland called the Nuggets about 3 m. SW of Molyneux. It has a coast line of about 53 m. and an average inland breadth of 7 m. This district is not heavily timbered like many of the northern localities of the island, and is abundantly watered. The S part is intersected by the rivers Puerua, Koau, Matou, and a multitude of smaller streams. The two last-named rivers are navigable for vessels of considerable tonnage. The Matou, Clutha, or Molyneux, which forms the S frontier of the settlement, is a fine stream which for 30 m. inland is nearly a $\frac{1}{2}$ m. broad, and 6 fath. deep. Connected with one another, and with the Matou, by navigable streams, are the lagoons of Kaitongata and Rakitoto, 1 and 6 m. long respectively. The head of the Rakitoto lagoon is about 18 m. from the mouth of the Matou; and here, in this direction, water-communication ceases. There is no formidable obstacle to the formation of a road between this and the plain of the Tokomariro, which consists of about 7,000 acres, well watered and free from swamps. From this valley there is almost a level pass into that of the Taieri, where water-communication again commences; and by means of the Waiholo lagoon and the Taieri river, continues uninterrupted to within about 9 m. of Otago harbour. The Waiholo and Rakitoto lagoons are about 12 m. apart. The plain of the Taieri is swampy to a large extent, but on the whole will prove a valuable district. The Taieri river flows into the sea about 20 or 30 m. S of Otago. For the first 5 m. from its mouth, it is confined within lofty

and precipitous hills that barely afford it room to pass. Beyond this the valley suddenly opens, and the river branches, leading to the Waiholo on the S, and passing through the bulk of the valley on the N. Between the Taieri and Otago, the country consists chiefly of hills of moderate elevation, covered with a good soil, and over which, or through passes between them, a practicable road might readily be formed. The harbour of Otago is 13 m. long, by an average width of 2 m., with 6 fath. water for 7 m. up, from the Heads to the islands, and with 3 fath. for the remaining 6 m., up to the very head of the harbour. It is perfectly sheltered, and runs in a direction nearly N and S. The capital town, Dunedin, stands at the head of the harbour, in a situation of great natural beauty. Lying open to the N, it is entered with a fair wind; and a fair wind out of harbour also takes a vessel soon free of land, and if seized at the commencement, may carry a ship of average sailing qualities to Cook's strait in 48 hours. The distance between Port Nicholson and Otago is 320 m. Otago, being situated at a distance of between 150 and 200 m. from the chilling influence of the vast range of snowy mountains running along the W coast, has a markedly warmer climate than even Port Cooper, which, although lying 150 m. nearer the tropics, is yet within 20 or 30 m. of these mountains. The adaptation of the soil for the growth of wheat and other grain, and particularly of potatoes, and the richness and abundance of the pastures, seem to place this district in the foremost rank, in point of agriculture, amongst the soils of New Z. Coal, iron, and copper, are reported to have been found in it. Beyond the first ridge of down, which forms the S horizon from the harbour, lies an undulating country covered with grass. The anise plant, valuable as pasture for sheep and cattle, abounds on all this land. After traversing these downs for 5 m. from Otago, we overlook the plain of the Taieri, which contains about 40,000 acres of land, and is intersected by the river of the same name, navigable for large boats 12 m. from the sea, which it reaches at about 25 m. from Otago. The land at the head of the Waiholo lake consists of undulating downs, round-topped and covered with herbage, grass of various descriptions, and anise of large growth. Quails are plentiful over all these downs, and in the plains adjoining, and would be more so but for the hawks and kites. The view from Owiti is very extensive. At its base, to the SW, lies the plain of the Tokomariro, containing about 14,000 acres. To the E, hills to the breadth of 7 m. extend to the coast; on the N lies a portage of 6 m. between it and the Waiholo; and to the W, undulating prairies of boundless extent available for cattle and sheep three parts of the year. The communication with this country from Otago is easy. Water-carriage can be made use of down the Taieri to the head of the Waiholo lake. See article OTAGO.

Southern extremity.] From the Molyneux river a fertile upland country extends along the coast as far as the Bluff, a harbour at the E extremity of Foveaux's strait, which separates New Leicester, or the S island of New Z., from the Middle island. This strait was first discovered by the captain of a sealing-vessel in 1816. It is about 40 m. long, and 16 m. wide on an average; and is thickly interspersed with rocks. On its N side, after passing Waipapa point, Totoc's bay presents itself, into which the rivers Paponia, Makoruta, and Mataura discharge themselves. Bluff point, forming the W extremity of this bay, advances boldly into the strait, contracting it to a breadth of 12 m. To the W of Bluff harbour, we meet in succession the Waiopaki, Oretu or New river, and Aparima or Jacob river, the last of which

flows into a bight called Howell-road. Pahia point, 14 m. W of Jacob river, may be regarded as the NW extremity of Foveaux strait. From this point to Chalky bay, a deep irregular indentation in the SW angle of the Middle island, the coast is unexplored. The SW extremity of the island is bounded by elevated chalky cliffs, which are chiefly intersected by numerous narrow inlets of the sea, affording safe anchorage. The principal of these inlets are in succession, Chalky bay, to the N of Point Preservation; Dusky bay, separated from Chalky bay by West cape, and Gaol harbour.

[*Western coast.*] The W coast, from about the parallel of $45^{\circ} 30'$ to 44° S, presents a high craggy mountainous range at a short distance from the shore, which sends down large precipitous ridges abruptly terminating on the coast. To the N of the parallel of 44° , the mountains retire further inland, and the coast presents woody hills and valleys of various height and extent. Little, however, is yet known of the region stretching along the W coast of the Middle island from the parallel of 45° to that of $44^{\circ} 30'$. From the latter point to Cape Foulwind, the coast has been recently explored by Mr. Brunner, who describes it as uninviting to the settler, and presenting "fearful rocks and mountains," and much difficult beach-travelling. The chief geological formation is a coarse granite. Black birch is the prevailing timber. Numerous streams descend to the coast, the principal of which are the Mawera or Grey, and the Kawatiri or Buller. The former has its embouchure in about $42^{\circ} 35'$ S lat.; the latter nearly on the parallel and a few miles to the E of Cape Foulwind. From the river Grey to Cape Farewell, a range of mountains runs parallel to the coast, sending down spurs or lateral ridges covered with forests, which terminate in abrupt cliffs and headlands on the coast. Each of the valleys between these ridges is intersected by its own stream, which is fed by the snows of the central chain.

III. NEW LEINSTER, or STEWART'S ISLAND. This comparatively small island has a triangular form, and is about 40 m. in its greatest length and width. Its surface is undulating, and rises to a high peak towards the centre. Its area has been estimated at 1,000,000 acres. At its NE angle is a fine harbour called Paterson inlet; near the centre of its E coast is Port Adventure; and near its SE point is Port Pegasus. A few Europeans are settled upon it, who are chiefly employed in the whale and seal-fishery.

[*GENERAL NOTICES.*] Having thus slightly sketched the topography of the three main islands constituting New Z., we shall subjoin a few general notices relative to the whole country.

[*Climate.*] The climate of New Z., and particularly of the northern island,—which, being the farthest from the pole, seems to possess greater natural advantages than the others,—is not unlike that of the British islands, more particularly that of Ireland, but is more equable, and neither so cold in winter, nor in reality so hot in summer. It is moist and temperate, the cold being seldom more intense than barely to produce a hoar-frost on the surface. The lowest point of the therm. is 40° ; it generally ranges from 50° to 60° ; nor is the heat of summer so great as to destroy the verdure, there being frequent rains and cloudy weather, in which the therm. seldom rises beyond 78° , while it generally ranges between that point and 66° . In so large an extent of territory, it will necessarily be supposed that the climate will vary considerably; that the N will be warm, approaching to tropical, and that the S will be cold, partaking more of the character of that to which we

are accustomed in England; nor is such a supposition altogether erroneous. Local differences no doubt exist, dependent upon other causes than mere lat. and long., such as the proximity of a district to the coast, to a widely-extended plain, or to an inland range of mountains; it will be found, however, that in those districts which have been made available for settlement, no very remarkable variation is perceptible. Snow and frost occasionally occur during winter; the former is mostly confined to the hills and high lands; on the tops of the many ranges of mountains it is to be seen all the year round, and the latter is felt more sharply in the extensive and open plains of the S. Violent gales are frequent, and continually change their direction,—a circumstance ascribed by Cook to the great height of the mountains. Mr. Earl says: "Although we were situated in the same lat. as Sydney, we found the climate infinitely superior. Moderate heats, and beautifully clear skies, succeeded each other every day. We were free from those oppressive, feverish heats, which so invariably prevail in the middle of the day at Sydney, and from those hot, pestilential winds which are the terror of the inhabitants of New South Wales; nor were we subject to those long droughts which are often the ruin of the Australian farmer." Dr. Duffenbach says: "New Z. being situated within the temperate zone, although nearer the equator than Great Britain, possesses, from its peculiar geographical position, especially from its being insular, and also from the nature of the surface, a climate so modified as to resemble that of England more nearly than that of any other country I am acquainted with. The E coast on which Wellington, Auckland, and the Bay-of-Islands are situated, is colder than the western, where the settlements of Nelson and New-Plymouth have been founded, and where the air is far softer and milder. I ascertained this by actual comparisons, and in this respect the W coast must have great advantages over the E. In the interior of the islands the climate is colder and less changeable, in consequence of the presence of a snow-clad mountain-group, and the greater distance from the ocean. I found at Taupo, the acacias of Van Diemen's Land, the *Ricinus palma Christi*, and potatoes, affected by the frost,—a circumstance which never happens near the coast; the leaves also of several trees had become yellow and deciduous; and the landscape assumed an autumnal tint, although it can scarcely be said ever to have had a wintry appearance. At Wellington, on the contrary, and along the whole coast, the natives plant their potatoes at all seasons of the year; the forest remains ever green; and the opening of the flower-buds is merely a little retarded during winter, the presence of which is only indicated by more frequent rains and winds."—The following is a comparative table of the climate of London in N lat. $51^{\circ} 30'$, and of Wellington in the North island, which is centrally placed in S lat. 41° , about 5° to the N of Otago, and as many to the S of Auckland:

	Mean temp.	Mean of winter.	Mean of hottest month.	Average No. of Days on which rain falls.	Mean Annual quantity of rain in inches.
London,	50.39	39.12	63.43	178.	24.80
Wellington,	52.50	48.85	64.25	128.	28.73

The following table exhibits the temp. within 2 m. of the coast of Blind bay, in the Nelson settlement, on the Middle island, in 1845:

	Mean lowest.	Mean highest.	Mean noon.
January,	...	74	72
February,	...	71	70
March,	...	69	68
April,	...	66	64
May,	...	60	60
June,	39	56	54

July,	40	57	55
August,	36½	58	55
September,	34½	64½	61
October,	40½	67	68
November,	40½	72	68
December,	42½	75	70½

At Auckland, which is not more than 100 m. S of the Bay of Islands, the mean temp. is 59°; that of the three summer-months 67° 2'; of the three winter, 52°. Their difference is only 15° 2'; and their mean only 6-10ths of a degree above that of the mean annual temp.

Vegetable kingdom.] Vegetation in New Z. is uncommonly luxuriant, and the number of plants formerly unknown, to Europeans is great; but the botany of these islands has as yet been very imperfectly investigated. The whole number of plants at present known does not exceed 700 species; but the greater number of its species, and even genera, are peculiar to itself. More than 140 species of fern, some of which are arborescent and 40 feet high, are natives of these islands. The most beautiful forms of New Z. vegetation are the tree-ferns and cabbage-palm. The clearing of the forests is exceedingly difficult, but generally there is no tap-root: the roots run along the surface, so that it is not very hard to get them up. The timber of New Z. is much more profitable than the ordinary timber of New South Wales. The *kauri* kind, which will grow 90 or 100 ft. high without a branch, is in use by the Admiralty for spars. At present the difficulty in its exportation is the want of facility for water carriage. There are 5 species of beech and 10 of conifera peculiar to New Z. Ornamental woods grow in abundance, but they are destroyed with the others in clearing, as the expense of transport would be more than they are worth in England. There is a great demand for timber and spars in all the Australian colonies; the prices obtained for New Z. timber, hitherto sent, are highly remunerative, but the supply bears no comparison to the demand. In Sydney and the other colonies they have nothing but the brittle cedar and the 'blue gum,' which is as hard as iron, and quite useless for building-purposes as no nail can be driven into it. The fine pines of New Z. are naturally adapted to supply this deficiency, being within 10 or 12 days' sail of Sydney or Hobart-Town. The black birch and *tetaki* are excellent woods for ship-building or other purposes requiring strength and durability. At Nelson alone there is sufficient wood to bring in £1,000,000, all easy of access, the greater part growing close to water navigable for boats at every tide; the ground is level, and roads are made to and through different parts of the wood. It can be put from the saw-pit on board ship for 1s. or 1s. 3d.; and the price obtained for New Z. wood in the adjacent colonies varies from 10s. to 25s. per 100 ft. The sea-coast is in many places destitute of timber; but the whole of the interior is an immense forest. A kind of myrtle is found, the leaves of which form a tolerable substitute for tea. The mulberry tree is sometimes seen, though not frequently. The oak has been successfully introduced from Great Britain.—Flax—the *Phormium tenax*—grows wild in all parts, and appears to be indigenous and inexhaustible. Its fibre is twice as strong as that of the common flax, and very nearly equal in tenacity to that of silk. At Sydney it is manufactured both into cordage and canvass. The *Phormium tenax* resembles the garden iris: its chief peculiarities consist in the fibre being obtained in the leaf, and not, as is the case with European flax, from the stem; the outside coat of the leaf being stripped, the fibres are perceived running parallel to one another, and lining the under surface of the leaf through the whole length. The leaves may be cut twice a-year,

the roots remaining in the soil for reproduction. A given quantity of *Phormium tenax* will, it is said, contain more of the fibrous substance than an equal quantity of Russian hemp. Seven varieties of it have been found. One peculiarity of New Z. is the abundance and nutritious quality of many of the native shrubs upon which cattle eagerly browse. One of these, the *karaka*, which grows to be a large tree, is invariably devoured as far as cattle can reach the leaves. The grasses also are very numerous. The porcupine-grass, when young, is devoured by sheep with avidity, and the root is a favourite and agreeable food both with natives and stockmen. But when fully grown, this grass is a great annoyance to the pedestrian; its stems closely resemble the quills of the porcupine, and are nearly as formidable to the legs of the stockmen. The *tohi-tohi* is highly valuable, not more on account of its fitness for pasturage—for when young it is greedily devoured by cattle and horses—than on account of its value in house-building. It is a reed, which in swampy places grows to the height of 8 or 9 ft. The edge of its leaf is toothed like a saw; and from the silicious nature of the plant, this jagged leaf requires to be handled with caution, as it is capable of inflicting a disagreeable wound. The two properties of the *tohi-tohi* just described, together with its great length, render it invaluable for thatching roofs. The silex of the plant, by throwing off the rain, renders the roof impervious to water, and the toothed edge of the leaf, penetrating the others bound up with it, renders the cohesion of the mass perfect. This seed also forms a very elegant lining to the interior of the native hut. It is of a deep yellow colour, and, from its flinty covering, possesses a considerable polish. Placed side by side, and perpendicularly from the floor to the roof, these reeds are tastefully bound together by the flax leaf dyed of a glossy black by the bark of the *hinau*. From the top of the reed springs an elegant white plume, which might be readily taken for an ostrich feather, and forms an excellent substitute for feathers in a bed, if the plume is extracted at a proper season. The *raupo*, another swamp plant, is also used for thatching roofs. It is, in fact, a bulrush, and when carefully dried, is used for stuffing pillows. Another, and a finer kind of grass, is also used for thatching roofs, and is in great estimation amongst the natives for the manufacture of eel-nets. The value of the three last mentioned plants to the native may be estimated from the fact that his dwelling, with the exception of its *manuka* poles and rafters, is entirely composed of them. Few, if any, nails are used, but the whole is firmly bound together with the leaf of the flax plant. Among the native fruits the *tawa* resembles a prune damson, but is more oblong, and of a blue-black colour, with a beautiful bloom. Its fruit contains a soft bitter kernel forming almost one-half the bulk of the fruit. The natives eat these berries in large quantities. The pulp is grateful to the palate, and is remarkable for the coolness which it imparts to the mouth. The *kia-kia* is a singular and very delicious fruit, springing from the base of a number of leaves from 18 inches to 2 ft. in length, which radiate from the same point. At this point, or the base of the leaves, is the fruit, in appearance a species of vegetable albumen, and resembling, when unripe, the white of an egg when boiled. As it ripens it becomes darker in colour, and is very juicy. If collected and placed in a vessel it deliquesces, fully one-half becoming liquid, and a large quantity of saccharine matter is the result. *Maiberry*, or *matahi*, is a small round fruit of the same colour as the tawaberry, the bloom being even more beautiful. The fruit when gathered is perfectly dry, but after lying together for a few hours

the juice bursts through its delicate skin in large quantities, and is very glutinous. Its flavour is delicious in warm weather, being slightly acid. The *tetoki* berry is a fruit resembling a raspberry, but somewhat lighter; its flavour is slightly acid. This fruit contains a small jet-black kernel yielding a large quantity of oil which is highly prized by the natives as an unguent for the hair. The *fuschia* berry is here an oblong fruit about three-quarters of an inch long, and a quarter of an inch in diameter. It is very sweet and juicy, and forms an admirable preserve. The *kaitatea* berry is about the size of a small pea, with a very grateful flavour. The *karaka* berry forms a chief article of food amongst the natives. This fruit resembles in form a large olive, and contains a kernel; its colour is yellowish-red, and its flavour not unlike that of a ripe medlar. The *tutu* berry is also consumed in large quantities by the natives. It is very juicy, and this juice is fermented by them into a kind of wine of which they are very fond. The seeds contained in the berry are poisonous, and the shrub on which it grows is very destructive to sheep and cattle, which are nevertheless fond of browsing on it. The effect seems to be a narcotic intoxication, from which, if they are not speedily relieved by bleeding, they soon die. Whilst enumerating the fruits of New Z., the honey of the *phormium tenax*, or flax plant, must not be forgotten. It lies in the cup of the flower in somewhat considerable quantity, and surpasses in deliciousness of flavour the finest honey collected by bees. The *nikau*, a substance which grows on the summit of the stem of an elegant palm bearing the same name, consists of a number of concentric layers, the outer of which must be removed till the inner ones are found to be tender, and these are edible. The *pura-pura* berry is about the size of the tawa berry, of an oval form, and a yellowish-red colour when perfectly ripe; before that they are, like most of the New Z. fruits, of a very disagreeable, bitter flavour. The *pura-pura* is highly esteemed for preserving. Its fruit is full of seeds, like the gooseberry. The water-melon is another native fruit, though not indigenous, the New Zealanders referring its introduction amongst them to the same period as potatoes, viz., the different visits of Captain Cook. It has not degenerated in flavour; and from the ease with which it is raised, it may be inferred that many of the finer kinds now known in Europe might be grown by every cottager as readily as a bed of cabbages. The root of the *ti* tree, a species of palm, is in use amongst the natives in the vicinity of Otago. It contains a large quantity of saccharine matter. The banana and mango are grown, but do not flower. The sugar-cane, however, flourishes at Hokianga. Various species of the *taro* or *Arum esculentum* are grown, but the *Kumera* or *Convolvulus battata*, forms the favourite harvest of the natives. The common potato improves the farther south it is cultivated.

Animal kingdom.] It is a remarkable fact that two such large islands, with such a variety of surface and of elevation, should, with the exception of a small rat, possess no indigenous animals. The first pigs were left by Captain Cook, and there are now numerous herds running wild in the woods, besides numbers reared by the natives and settlers. The fern root supplies these animals with inexhaustible abundance of a favourite food. Goats have likewise been domesticated by the natives; but there are comparatively few on the islands. Dogs abound, especially at the Bay-of-Islands, and are employed by the natives in hunting down the wild hogs. They are supposed to have been introduced by Juan Fernandez. The cat is eaten by the natives, and its skin is highly prized. The New Z. rat, which is also

an article of food, was probably imported by European vessels. The birds are numerous, and many of them beautiful. "The wild melody of the birds in a New Z. forest," says Pollock, "is superior to any strains of the kind I ever heard." The melody commences at the earliest dawn, and ceases at sunrise. Wild ducks, wood-pigeons, gulls, rails, parrots, and paroquets, abound. Poultry of all kinds thrive well, and find abundant food in the swarms of insects and flies. Fish of various kinds are plentiful upon every part of the coast, and form a considerable part of the food of the natives. The whale and seal are abundant in the neighbouring seas. Mackarel, red mullet, lobsters, crayfish, herrings, codfish, flounders, and a fish resembling the salmon, frequent the coasts; eels are very plentiful in the rivers of the Middle Island.—The *namu* or sand-fly appears in myriads on the borders of streams or marshy places; and the *waiwai roa* or mosquito likewise abounds; and the *keha* or flea. Beetles of many varieties, the black ant, gad-fly, flesh-fly, and locust, are numerous, and a species of scorpion and of centipede, both harmless, occur.

Soil.] "New Z.," says Mr. Heaphy, "from its possession of a rich and fertile soil, a sufficiently moist atmosphere, and a mild climate, has every requisite for the successful practice of all European agricultural and pastoral pursuits. Experience has now shown that all kinds of grain, vegetables, and fruits grown in England, flourish equally well in that country; and that many fruits, for which the English climate is too severe, may there be cultivated with success. That the soil is pre-eminently of that nature suitable for the production of grain, cannot now be doubted, as the specimens already obtained prove that, with but little attention being paid to its culture, wheat especially will thrive." The soil is in many parts extremely rich, but unlike the climate it varies considerably. Without doubt, that which is thickly timbered is the best, though that covered with fern and scrub, apparently unpromising in fertility, is found to produce excellent crops as soon as the fern roots are thoroughly rotted and the soil consolidated. To an English farmer, it will be praise sufficient to say that turnips grow with a vigour unsurpassed anywhere, and that beans, pease, and other leguminous plants, are equally successful. Fern land is often called bad land; but it is, in fact, among the most valuable land in the colony, or may be made so. If you turn up the fern land, you will not get a good crop off the first year; but this arises from two causes; first, from the nature of it, that it is a marl, and not a clay,—an argillaceous marl; and next the mode of clearing, that is by burning off the fern; whereas the argillaceous marl contains more alkaline salts than are good for cultivation, and by burning you add to them the alkaline salts of the plant, which contains perhaps more than any other plant; but if the land is ploughed up, and suffered to lie fallow for a year or two, enormous crops are produced from it. At Port Nicholson, turnips, carrots, broccolis, cabbages, pease, beans, and, in fact, all garden produce, have been cultivated with success. Great quantities of maize and of potatoes have been exported to Sydney from all parts of the island. Potatoes planted in the English method, upon cleared forest-land, have yielded 14 tons per acre. Pease thrive well, and ripen during ten months of the year. Mangel-wurzel, Cape barley, and maize, form principal objects of cultivation. "The natural resources of New Z. hitherto discovered, are now well known to be great; but they are not," says Captain Fitzroy, "of a kind to demand merely slight exertions, in order to make them available. A very healthy climate, favourable in a high degree to old as well as young people, but

particularly to children; a rapid vegetation, which continues throughout the year excepting a few weeks; and an equable moderate temperature, are permanent advantages of the first class; but the excess of wind and abundance of rain, in some particular localities, must not be overlooked. The principal natural productions are timber of many qualities, from the hardest and toughest to the lightest or most pliable, flax, gum, bark, dye-wood, copper, sulphur, manganese, iron, china clay, fuller's earth, coal, limestone, lead, silver, alum, ochre, pumice-stone, and volcanic earths. As cultivation extends and cattle increase, corn, European flax, potatoes, hides, and wool of excellent quality, will be produced in greater abundance. Even in the rough 'bush,' as it is called, cattle, horses, sheep, and goats thrive greatly; but as pastures improve, animals will likewise become proportionally better in their respective qualities. The wool of New Z. is already known as long in staple, and uniform in strength of fibre,—effects of equable moderate temp., and continuance of nourishing food throughout the year. The quantity of land necessary to support sheep is exactly the reverse of Australia. One acre would support 3 or 4 sheep in New Z., and it would take 3 or 4 acres to support one sheep in New South Wales. It is probable that wool, hides, tallow, and salt provisions will become staple articles of export, especially from the middle island, where there are so few natives that the progress of colonization would not be impeded materially."—The following table from *The Wellington Almanack* for 1851, shows the quantity of land under cultivation by Europeans, the number of the European pop., and the amount of stock held by them in the several settlements of New Z., in 1850:

Localities.	Acres in crop.	Horses.	Horned cattle.	Sheep.	Goats.	Europ. pop.
Auckland	8,082½	725	6,803	3,281	245	8,301
Wellington	4,436½	809	8,068	42,652	1,299	5,479
Nelson	4,242½	441	5,052	70,960	5,337	4,047
New Plymouth	3,217	57	1,147	1,934	69	1,412
Bay of Islands	850	166	1,700	2,330	600	400
Manganui	381½	78	1,000	420	60	259
Akaroa	145	19	614	1,630	389	295
Petre	148	95	2,839	6,248	125	432
Otago	510	298	1,725	19,751	130	1,482
Canterbury	...	34	739	10,900	50	2,300
Totals	22,013½	2,722	28,687	160,106	11,404	24,407

Minerals.] Little is yet known of the mineral treasures of New Z., even in the northern districts, and nothing at all of the contents of the central and southern parts of the islands. Volcanic action has been remarkably intense in the northern island, and slight earthquakes have been felt; but there is no evidence of any damage to buildings hitherto erected, neither have the natives any distinct account of serious convulsions having occurred for some generations. The more valuable minerals hitherto found are coal, iron, limestone, copper, tin, manganese, nickel, lead, bismuth, arsenic, cerium, sulphur, alum, rock salt, marble of various qualities and colours, cobalt, ochre, fuller's earth, asphaltum, pumice, volcanic earths, and lavas, &c. Of the copper, the per centage of metal is usually very high, and the ore is easily smelted. Much of the manganese contains a larger per centage of copper. Both this and the copper can be quarried, rather than mined, in abundance. Fuller's earth, fire-clay, and stone fit for furnaces, which the bakers here use for their ovens, can be found anywhere in this neighbourhood. Coal is plentiful in several places, but has yet been worked near Nelson only. There is an extensive coal-field near the Waikato river; and there is said to be ex-

cellent coal remarkably convenient for shipping in Preservation harbour, at the S end of the Middle island. This coal is strongly impregnated with sulphur, so that it discolours any lackered furniture there may be in houses, but it is admirable for steamers. It is said, however, to partake of the character of some of the oriental coals, and to have the property of spontaneous combustion.

Inhabitants.] New Z. appears to be thinly inhabited. The area of the three islands of the group exceeds by about 100,000 acres the whole of Great Britain and Ireland, with all the little islands that surround them. The British islands are inhabited by 27,000,000 of civilized inhabitants; the New Z. islands by about 100,000 natives, and about 13,000 settlers of British origin. The north island is nearly a thirty-second part less than England, exclusive of Wales and Scotland, and more than 85,000 of the whole number of aborigines inhabit it. The middle island is one-ninth part less than England and Scotland, and its native inhabitants do not exceed 12,000. The scanty native pop. is not equally scattered over the islands, but concentrated principally in a few localities. In a despatch by Governor Grey, dated 9th July, 1849, the following sketch was given of the state and position of the settlements in general: "They are composed at present of what may be termed nine principal European settlements, besides smaller dependencies of these. The largest of the settlements contains about 7,000 European inhabitants, and their total European pop. may be stated at about 20,000 souls. These settlements are scattered over a district of about 800 m. of lat.; they are separated from each other by wide intervals; and communication even by persons on horseback exists only between three of them. The wide intervals between these European colonies are occupied by a native race of 120,000 souls, a very large proportion of whom are males capable of bearing arms." The southern part of the northern island is almost entirely a desert. On the W side of the northern parts, inhabitants are to be found only in a few places. The interior is mountainous, and so completely covered with trees that the people cannot be numerous. The E coast of the northern island appears to be better peopled than any other district of New Z.; but even in this district the inhabitants are far from being numerous.

Natives.] The New Zealanders form perhaps the most interesting branch of the great Polynesian family. They are of the ordinary size of Europeans, perhaps, on an average, a little taller. They are not unfrequently well-made; but their limbs, from their mode of sitting on their hams, often want that proportion which is necessary to true symmetry. The complexion of many is fair; but, in general, it is brown,—a circumstance which may arise from their constant exposure to the weather. In the form of their features they are not greatly different from Europeans. Their hair is black, coarse, and long, cut short behind, and the remainder tied in a bunch upon the top of the head. Their eyes are large, their lips thick; and their teeth—unlike those of most savage nations—large and irregular. The women differ little from the men, except that they are of a less stature, and have softer voices. The features and figures of some, however, are delicately moulded. The ordinary native dress is of the flax, so plentifully produced in the country; not woven, but knotted in a peculiar manner. This garment, 5 ft. in length, and generally 4 ft. in breadth, is fastened round the shoulders by the two corners, and round the middle by a girdle. Over it many wear a large mantle extending from the shoulders to the heels. They employ two blankets, or assume European dresses, whenever they can acquire them. A more simple covering, and one not uncommon, consists of a kind of plant, woven in a particular way, tied round the neck with a string, and suffered to fall down to the middle of the thigh. Their ornaments are feathers upon the head, combs, and pearl shells. The ears are almost universally perforated, and adorned with beads, pieces of jasper, and sometimes with pieces of cloth. Their language is radically the same as the Tahitian. Their numbers are thought to exceed 120,000. They are divided into various tribes, which the extent of the country permits to remain in situations entirely separate. Mr Ward, the secretary of the New Zealand company, says of the New Zealanders, "There is a natural politeness and grandeur in their deportment,

a yearning after poetry, music, and the fine arts, a wit and eloquence, that remind us, in reading all the accounts of them, and in conversing with those who have resided amongst them, of the Greeks of Homer. Their language is rich and sonorous, abounding in metaphysical distinctions, and they uphold its purity most tenaciously, although they had no knowledge of writing until the missionaries reduced their dialect to a grammatical form. It is radically the same with that of Tahiti, and of the kindred nations. They have an abundance of poetry of a lyrical kind, of which we have seen many specimens, in a metre which seems regulated by a regard to quantity, as in Greek and Latin. They are passionately fond of music." Mr. Nicholas, in his *Narrative of a Voyage to New Z.* in 1817, speaks of having heard amongst them "a plaintive and melodious air, which seemed not unlike some of our sacred music in many of its turns, as it forcibly reminded me of the chanting in our cathedrals." They excel in carving, of which their war-canoes, carrying 100 men, are specimens. Baron Hugel, who visited the country, affirms, as do the missionaries, that there is not, in the northern island at least, a single tree, vegetable, or even weed, a fish, or a bird, for which the natives have not a name; and that those names are universally known.—The most striking of their social institutions is that of chieftainship. Society is divided into three principal gradations: the *areroes* or chieftains; the *rangatiras*, being the gentry or middle class; and the *cookers* or slaves. "There is a remarkable difference between the chiefs and the common people; the former are generally taller, their forms of a finer mould, their features aquiline, and their foreheads broad. Most of the chiefs have a quiet polite dignity of manner, which is very pleasing, and but for the old cannibals' tattooed visages, you might sometimes fancy some of them to be well bred old gentlemen. This tattooing is generally done in spiral lines, one within the other; these are drawn on their cheeks and foreheads as accurately as an artist would draw them with his compass. The women generally tattoo only the upper lip; this, the abode of all the graces, they stain quite black, destroying all expression, and often making a face not quite ugly perfectly so. The natives are, in their own way, industrious, but they do not like to work for a length of time; the labour of three months in the year, on their India corn plantations and potatoes, is sufficient to provide them with the absolute requisites of life, and most of them do not see much good in spending the other nine in hard work; yet they are all extremely fond of money, and in many instances steadily pursue commerce and agriculture. In one district they own 1,000 head of cattle, and 6 corn-mills, and cultivate 10,000 acres of wheat. They are generally ambitious to obtain European comforts and practise European manners. Their old mode of salutation, viz., rubbing noses, is fast falling into disuse, and has given place to the shake of the hand and the formal bow. Sir George Grey, in a recent despatch, gives a highly favourable character of the native pop. in general. "With these characteristics of courage and warlike vagrancy," he says, "the Maories present other remarkable traits of character. Nearly the whole nation has now been converted to Christianity. They are fond of agriculture; take great pleasure in cattle and horses; like the sea, and form good sailors; have now many coasting vessels of their own, manned with Maori crews; are attached to Europeans, and admire their customs and manners; are extremely ambitious of rising in civilization and becoming skilled in European arts; they are apt at learning; in many respects extremely conscientious and observant of their word, are ambitious of honours; and are probably the most covetous race in the world. They are also agreeable in manners, and attachments of a lasting character readily and frequently spring up between them and Europeans. Many of them have also now, from the value of their property, a large stake in the welfare of the country; one chief has, besides valuable property of various kinds, upwards of £500 invested in government securities; several others have also sums of from £200 to £400 invested in the same securities." He goes on to say: "It would appear that a race such as has been described could be easily incorporated into any British settlement, with mutual advantage to both races, the natives supplying agricultural produce, poultry, pigs, and a constant supply of labour (although yet for the most part rude and unskilled); while, upon the other hand, the Europeans would supply the various manufactured goods required by the natives, and provide for the manifold wants created by their increased civilization. Such a class of settlements might easily grow into prosperous communities, into which the natives, with characters softened by Christianity, civilization, and a taste for previously unknown luxuries, would readily be absorbed. This process of the incorporation of the native pop. into the Europeans' settlements has, accordingly, for the last few years, been taking place with a rapidity unexampled in history. Unless some sudden and unforeseen cause of interruption should occur, it will still proceed, and a very few years of continued peace and prosperity would suffice for the entire fusion of the two races into one nation." Throughout New Z., four-fifths of the natives have embraced Christianity, and attached themselves either to the Wesleyan or the Church of England missionaries; but a considerable number at the Bay of Islands have lately ranged themselves under the banners of the French Roman Catholic bishop.

British population.] The following is a return of the British pop. in the different settlements in New Z., in 1842 and 1847:

	1842.	1847
Auckland	2,895	5,217
Wellington	6,000	4,400
Nelson	2,506	2,867
New Plymouth	895	1,137
Petrol	290	166
Bay-of-Islands	380	677
Hokitanga	263	
Akaroa, comprising Banks' pen- insula	208	247 in 1846
	13,341	14,791

Commerce.] The exports from Auckland in 1845 amounted in value to £45,411; in 1850, to £45,765. The following table exhibits the commercial movement of Wellington, Nelson, and New Plymouth, for the years mentioned:

	Imports.	Exports.	Shipping Inwards.	Shipping Outwards.
Wellington.	£	£	Tons.	Tons.
1841	53,625	14,447	74	18,922
1842	112,592	12,156	80	17,337
1843	87,885	29,059	41	9,020
1844	36,175	30,373	44	6,899
1845	45,221	26,614	40	4,382
1846	59,415	31,281	47	8,362
	392,915	143,830	326	65,922
				51,513
Nelson.				
1842	18,378	...	34	10,132
1843	28,867	629	27	6,316
1844	20,228	1,510	31	5,386
1845	6,297	1,891	9	1,001
1846	3,082	1,819	16	2,269
	76,853	13,850	117	25,104
				4,314
New Plymouth.				
1842	1,801	165	3	747
1843	3,125	...	4	688
1844	3,572	...	9	2,754
1845	542	...	1	44
1846
	9,040	165	17	4,233

In 1841 spars formed the largest single item of domestic produce exported, the value being £500. In 1842 sperm-oil figures for £1,984. In 1843 copper-ore is the chief article, and is put down at £6,800. In 1844 sperm-oil again takes the lead, although it only amounts to £2,214, and copper-ore does not appear at all in the list. In that year manganese is the article second in importance, the amount being £1,865. In 1845 kauri gum is at the head, and for no less an amount than £12,847; copper-ore, of which the amount is £9,125, being next in order. In the half-year ending 5th July, 1846, copper-ore again takes the lead, the quantity being 436 tons, and the value £8,420. Sperm-oil comes next, being £2,505, and kauri gum next, being £1,261; the minor articles comprising firewood, flax, grain, salted pork, potatoes, spars, sawn timber, whalebone, wool, &c. The imports and exports for the years 1848 and 1850 are thus stated:

	Imports.	Exports.
	1848.	1850.
New Ulster	£124,434	£108,793
New Munster	100,410	131,410
	224,844	240,203
Totals	£233,844	£240,203
		£44,215
		£115,414

During the year 1851, for which the returns have not yet been published, the pop. and stock, as also the imports and exports, are known to have been largely increased. The discovery of gold in Australia has already proved beneficial to this colony, by opening up new markets for her agricultural produce, the result of which has been that an increased amount of land has recently been brought under cultivation. As regards the mineral resources of the country, it is stated that both coal and copper-ore have been discovered of a quality that will amply repay capitalists for their working.

Fisheries.] When the settlement of Wellington

was established in 1840, this branch of industry was entirely in the hands of the Sydney merchants. A considerable number of small vessels, many of them owned in Sydney, were engaged in sending supplies of provisions and whaling stores to the whaling stations on the east coast and in Cook's strait, and in taking off the oil to Port-Jackson. Though the fish existed in the New Z. waters, the oil and bone were productions of Sydney enterprise, capital and labour. They ought no more to be claimed as New Z. productions, or as a New Z. export, than the French fisheries on the banks of Newfoundland should be deemed British, so long as the enterprise, capital, skill, and labour of another colony were alone employed in this business; it added nothing to the wealth of this colony. The settlement of Wellington was, however, scarcely established, before New Z. merchants and small-craft owners began to take a share in this enterprise. Some of the whaling-masters also found it convenient, as well as advantageous, to fit themselves out here; and for the last three or four years the whole trade has been transferred to us. The quantity of oil caught has varied from 8,000 to 1,300 tons per annum. A small quantity of sperm-oil has also been secured, averaging about 15 tons per ann., and the bone may be stated at about 40 tons per ann. The total value of the fisheries, from the 25th August, 1841, to the 5th January, 1847, at an average value, may be estimated at £86,625.

Government. The new charter of 1846 repealed that of 1840, and created municipal, legislative, and administrative powers for New Z. The municipal administration was the basis of the whole system. Every district settled by colonists of European birth or origin was erected into a borough; every borough elected a common council, from which were to be chosen a mayor and a court of aldermen. The common council, besides electing the magistrates to whom the local administration of the district or borough was confided, were also to elect members to serve in a house-of-representatives, forming one of the three estates of a provincial assembly. The whole of New Z. was to be divided into two or more provinces, and in each of these laws to be made for the province by the house-of-representatives, a legislative council, and the governor, who together constituted the provincial legislature. As there were many topics of general concern to all the inhabitants of New Z., respecting which some uniformity of legislation and administration will be indispensable, a general assembly of the New Z. islands was to be held by the governor-general, composed of himself, and of a legislative council, and a house-of-representatives; but no one could be a member of the legislative council of the general assembly who was not also a member of one of the legislative councils of the provincial assemblies; neither could any one be a member of the house-of-representatives of the general assembly who was not a member of a provincial house-of-representatives. The charter provided for the creation of a governor-in-chief, a governor of each of the two provinces immediately to be established, and a lieutenant-governor for each. To the governor-in-chief it was to belong exclusively to correspond directly with the secretary-of-state for the colonies, and exercise over the lieutenant-governor the same authority and control that the secretary-of-state exercises over him. In May 1852, her majesty's ministers presented a bill for granting a constitution to New Z. "He could only look on this measure," said the colonial secretary, when moving for leave to bring in his bill, "as the commencement of a system which there was no doubt it was most desirable to see established; and therefore it was the intention of government to introduce clauses in this bill, enabling the legislature of New Z. from time to time, to propose and effect such changes in their institutions as they may think fit." By this bill it was proposed that the central legislature should consist of the governor, a legislative council, and an elective assembly. The members of the legislative council were to be nominated by the Crown; the franchise for the elective assembly, was to be possessed by all who possess a freehold worth £50 a-year, all who occupy a house in town worth £10 a-year, or in the country of £5 a-year; and all who possess leasehold property for ten years to run worth £10 a-year. The electoral districts were to be fixed by the governor. The number of councillors was not to be more than 15, or less than 10; the number of members of assembly not more than 47, or less than 25. The provisions of this bill failed to satisfy the house-of-commons, though acknowledged to be an approximation to a sound system of government. A legislative council composed of nominees of the Crown, it was justly argued, could never satisfy the colonies, and was an unhappy departure from Lord Grey's principle of a council elected by local legislation. The principle of subdivision contained in the bill was also strongly condemned. It was argued that the colonists themselves had already strongly

condemned the system of provincial councils, which then existed, as being "calculated utterly to destroy that unity of action, accompanied by economy, which can alone confer an uniform national character upon the different portions of the colony, which it should be the desire of all to establish;" and it was evident that the same condemnation applied still more forcibly to the system of provincial councils contained in this bill. The colonists stated that "one centrally situated executive, with the aid of steam vessels to keep up a rapid and regular communication between the settlements, would be infinitely more direct and efficient in its action, and far less costly in its maintenance, than any number of provincial councils could hope to be; while, to meet the wants of each separate district, municipalities, with extensive powers of legislation on questions merely relating to such district, would amply suffice for all their local wants." If the principle of subdivision contained in this bill were carried out, New Z. would have ultimately to be divided not into 6 provinces, with 6 subordinate legislatures, but into 60 provinces, with as many subordinate legislatures, for the time will come when probably New Z. will contain more than 60 communities, each of them with a pop. six times as great as that of either Canterbury, Otago, or New Plymouth; and even then the population of New Z. would scarcely exceed 1,000,000. Each of these communities would be able to show that it differed in some respect from its neighbour, and ought to have the management of its local affairs. On the 30th of June 1852, an act to grant a representative constitution to New Z. received the final sanction of the Crown. The main provisions of this act are that the following provinces are established in New Z., namely, Auckland, New Plymouth, Wellington, Nelson, Canterbury, and Otago, the limits of the same to be fixed by the governor of New Z. Each province is to have a superintendent and a provincial council, of which the number, not less than 9, is to be settled by the governor; before the election of members of the provincial councils, the persons qualified to elect such members, are to elect a superintendent subject to the disallowance of the governor, in which case a fresh election is to take place, the superintendent to remain in office till a dissolution of the provincial council, and if, by death, or other cause, a vacancy shall occur, a new superintendent is to be elected; the governor is empowered to appoint electoral districts, returning officers, and to issue writs for such elections. Every person qualified for an elector is also qualified to be a member of the provincial council or to be a superintendent; every man of the age of 21 having a freehold estate of the clear yearly value of £50 of which he has been possessed for six months previous to the last registration; and every man holding a leasehold estate in the district of the yearly value of £10, which lease has not less than three years to run at the time of registration, or who is a householder within the district occupying a tenement within the limits of a town of the yearly value of £10, or without such limits of the yearly value of £5, and having resided therein for six months previous to such registration, is, if duly registered, entitled to be chosen; but aliens and persons convicted of treason, felony, or any infamous offence, are disqualified. Any member is empowered, if he see fit, to resign his seat in the provincial council; and if he neglect to attend its meetings for two successive sessions, or if he become bankrupt or insolvent, or a public defaulter, or be convicted of any criminal offence, his seat is to be declared vacant. The determination of questions as to vacancies is to be decided by the provincial council, but only when referred to them by the superintendent, who may also issue writs for the filling of any vacancies. The duration of the council is to be not more than 4 years, and the governor may, whenever he may deem it expedient, dissolve the same by proclamation. Sect. 32 establishes a legislative council for the whole colony, to be not less than 10, to be named by the governor, such members to be at least 21 years of age, and not aliens; the seats to be held for life, but may be resigned; or declared vacant for neglect of attending for two successive sessions, for taking an oath of adherence to any foreign power, on conviction of treason or other criminal offence, or becoming bankrupt or insolvent. By sect. 40 a house-of-representatives is appointed for the colony, the number to be not more than 42 nor less than 24, as the governor shall direct, such house-of-representatives, unless sooner dissolved, to continue for five years. The governor is empowered to appoint electoral districts for the election of members, and to provide all the necessary means for that purpose; the qualifications for voters or members to be the same as for the provincial councils. Her Majesty is empowered by letters patent to establish municipal corporations in any district in New Z., but the bye-laws of such corporation must have the sanction, and be subject to the alterations of the provincial council within whose province it is situated; and her Majesty may also cause by letters patent the customs and usages of the native inhabitants to be maintained in such districts as shall be set apart for that purpose. Power is given to the general assembly to regulate the sale, letting, and disposal of the waste lands of the Crown, and of all lands wherein the rights of the natives shall have been extinguished; but no persons other than her Majesty, her heirs and successors, are to acquire or accept any lands from the natives used by them in common, and no agreement for such purpose is to have any validity or effect unless entered into with her Majesty or for her by the governor. By sect. 74 the sum of £268,370 3s. with interest at the rate of 3 per cent. is declared to be due to the New Z. company, for the discharge of which one-fourth of all sums accruing on the sales of waste lands shall be paid to the said company so long as any part remains unpaid, but the company may release lands from

such payment upon such terms as the proprietors may deem fit, and make certain exceptions as to the waste lands of Canterbury, Nelson, and Otago.

Revenue. The revenue of the colony averaged about £45,000 from 1841 to 1844, and was £52,746 in 1845, of which amount £38,745 comes under the head of 'receipts in aid.' The expenditure for 1845 was £38,841. In 1849 the revenue was £48,589; in 1850, £57,743.

NEXOË, a sea-port town of Denmark, in the stift of Sieland, on the E coast of the island of Bornholm, and 20 m. E of Røerne. Pop. 1,400. It has an hospital, and possesses manufactories of cloth, and several breweries and distilleries. The port is good, but has little trade. In the vicinity are extensive quarries of freestone and mill-stone.

NEXON, a canton, commune, and town of France, in the dep. of the Haute-Vienne, and arrond. of Saint-Yrieix. The cant. comprises 8 com. Pop. in 1831, 9,307; in 1841, 9,157. The town is 12 m. N of Saint-Yrieix. Pop. 2,157.

NEYER, a district of Hindostan, in the prov. of Gujerat, near the E bank of the Great Runn. It consists chiefly of arid sand, the only supply of water being derived from wells. The inhabitants are chiefly Coolies, and are noted for brigandage. The locality is famed for its horses. The chief town is Wow.

NEYGENSTRAET, a commune of Belgium, in the prov. of E. Flanders, and dep. of Denderhautein. Pop. 244.

NEYNWAH, a town of Hindostan, in the prov. of Ajmir, and principality of Bundu, 30 m. from Ajmir. It is of large extent, and is enclosed by a stone wall and ditch.

NEYRAC (Le), a village of France, in the dep. of the Aveyron, and cant. of Estaing, 9 m. NW of Espalion. Pop. 1,000.

NEYVA, a river of Portugal, in the prov. of Minho, and comarca of Vianna. It has its source to the S of Oleiros; runs W; and after a navigable course of about 30 m., throws itself into the Atlantic, near a castle of the same name, and 6 m. S of Vianna.

NEYVA. See **NEIRA**.

NGAMI, a great inland lake of South Africa, a little to the S of the 20th parallel of S lat., and intersected by the 24th meridian of E long., at an estimated alt. above sea-level of 2,825 ft. It is reported to be about 60 m. in length, and 14 m. in breadth; and gives forth at its NE extremity a noble river called the Zouga, and receives another called the Teoge, at its NW extremity. The name is pronounced as if written with the Spanish *n*, the *g* being inserted to show that the ringing sound is required. It signifies 'green water;' but the lake has other names, as Inghabi, and Noka-a-Mampasi. The discovery, or rather re-discovery of this lake—for its existence appears to have been known to the early Portuguese explorers of S. Africa—is due to Mr. Livingston, a missionary stationed at Kolobeng, in S lat. 25°, and E long. 26°, a point 570 m. from Colesberg, and 900 m. from Algoa-bay, who with the view of pushing missionary enterprise further north beyond the Kalahari desert, which had hitherto presented an insurmountable barrier to Europeans, left that station on the 1st day of June, 1849, with two of his countrymen, and after travelling about 300 m., struck on a magnificent river, and winding along its banks nearly 300 m., reached the Batavania tribe, on the banks of the lake, in the beginning of August. For two or three days from the lake, the Zouga varies from 200 to 500 yds. in breadth, with flat and rather swampy shores. It then narrows and flows between high banks of limestone for six days; gain opens out and spreads into a little lake about

4 m. across; and then divides into two streams, which appear to become ultimately dissipated in sands and salt-pans. The N. lake itself is reported to be merely a reservoir for the surplus waters of a much larger lake or marsh about 150 or 200 m. beyond it. The Teoge river, which falls into its NW extremity, carries to it a large body of water, and has a rapid current; and its waters are uniformly greatly swollen at one period of the year. The banks of the Zouga are inhabited by the Bakhoba, or Baveye as they prefer to call themselves, a fine intelligent tribe, in every respect superior to the Bechuana. Their complexion, says Mr. Livingston, "is darker than that of the Bechuana; and, of 300 words I collected of their language, only 21 bear any resemblance to Sitchuana. They paddle along the rivers and lake in canoes hollowed out of the trunks of single trees, take fish in nets made of a weed which abounds on the banks; and kill hippopotami with harpoons attached to ropes. We greatly admired the frank, manly bearing of these inland sailors. Many of them spoke Sitchuana fluently, and, while the waggon went along the bank, I greatly enjoyed following the windings of the river in one of their primitive craft, and visiting their little villages among the reeds. The banks are beautiful beyond any we had ever seen, except perhaps some parts of the Clyde. They are covered, in general, with gigantic trees, some of them bearing fruit, and quite new; two of the baobab variety measured 70 to 76 ft. in circumf. The higher we ascended the river the broader it became, until we often saw more than 100 yds. of clear deep water between the broad belt of reed which grows in the shallower parts. The water was clear as crystal, and as we approached the point of junction with other large rivers, reported to exist in the N, it was quite soft and cold. The fact that the Zouga is connected with large rivers coming from the N awakens emotions in my mind, which make the discovery of the lake dwindle out of sight: it opens the prospect of a highway, capable of being quickly traversed by boats, to a large section of well-peopled territory. One remarkable feature in this river is its periodical rise and fall. It has risen nearly 3 ft. in height since our arrival, and this [September] is the dry season. That the rise is not caused by rains is evident from the water being so pure. Its purity and softness increased as we ascended towards its junction with the Tamonnake, from which, although connected with the lake, it derives the present increased supply. The sharpness of the air caused an amazing keenness of appetite, at an elevation of little more than 2,000 ft. above the level of the sea; and the reports of the Bayeye, that the waters came from a mountainous region, suggested the conclusion that the increase of the water at the beginning and middle of the dry season must be derived from melting snow. All the rivers reported, to the N of this, have Bayeye upon them, and there are other tribes on their banks. With the periodical flow of the rivers great shoals of fish descend. The people could give no reason for the rise of the water further than that a chief, who lives in a part of the country to the N, called Mazzekiva, kills a man annually, and throws his body into the stream, after which the water begins to flow. The principal disease reported to prevail at certain seasons appears, from the account of the natives, to be pneumonia. When the wind rises to an ordinary breeze, such immense clouds of dust arise from the numerous dried-out lakes, or 'salt-pans,' that the whole atmosphere becomes quite yellow, and one cannot distinguish objects more than 2 m. off. It causes irritation in the eyes, and, as wind prevails almost constantly at certain seasons, this impalpable powder may act as

it does among the grinders in Sheffield. We observed cough among them,—a complaint almost unknown at Kolobeng. Mosquitoes swarm in summer, and the banyan and palmyra give in some parts an Indian cast to the scenery." Mr. Livingston, and his companion Mr. Oswald, subsequently pushed their explorations northwards to the parallel of $17^{\circ} 25' S$, and between $24^{\circ} 30'$ and $26^{\circ} 50'$ E long., traversing a district watered by deep and constantly flowing streams supposed to be feeders of the Zambeze. In the *Graham's Town Journal*, a Mr. D. Campbell has given an account of explorations pursued by him in this quarter since the visit of Messrs. Oswald and Livingston, of which the following is an abstract. He left Colesberg in February 1851, with the intention of going to Sebutain, the chief of a powerful nation living on the Zambeze, and arrived there after a three months' journey, with three spans of oxen for his waggon. That chief was stationed on the banks of the river Chobe, on the opposite side of which is a very large town called Marami's town. The Chobe is a tributary to the great river Zambeze. It rises at some distance to the W, and empties itself into that river about two days' journey below where he encamped. About 3 or 4 days' journey below the junction of the two rivers are the splendid Zambeze falls. The natives pointed out a palmyra about 40 ft. high, and said that the falls were many times higher than that. Mr. Campbell did not see this river, nor its falls, owing to both rivers having begun to overflow their banks. Travelling farther N was rendered utterly impossible. When he arrived at the Chobe his waggon was placed close to its banks,—a week afterwards he had to track away from it to a distance of 3 m. The Portuguese, Mr. Campbell reports, carry on a flourishing trade here with the natives for slaves and ivory, in exchange for which they give guns capably manufactured, the barrels being far superior to our common musket. They also supply the natives with gunpowder, red and blue cloths, beads, and various other minor articles of trade. They come from a settlement on the W coast—the natives pointing to the NW from Morami-town. They come down the Zambeze, which rises in the far W, in canoes, and trade at the several towns situated on the banks of that river. They take away with them immense numbers of slaves and large quantities of ivory. The natives have splendid copper and iron arm-rings and other ornaments, which they obtain from a large Makoba tribe living in a very marshy country SW of Linquati, the chief town of the tribes about here. "The natives informed me," says Mr. Campbell, "that there was another lake many times larger than Lake N'gini, situated a long distance from them, a few points N of W, and a lofty range of mountains extending N and S to a very great distance. They also enumerated 13 large rivers within a distance of about 400 m. N of the Zambeze. There are also immense marshes to the NE of Marami's-town, round which the natives are obliged to travel, it being impossible to cross them. On the whole, I may pronounce this as the finest country I have ever seen; but, at the same time, it is the most unhealthy. I do not think it possible for a European to exist here during the summer, fever is so much more severe than at the lake. After having remained a month to rest my oxen, I started back, accompanied by Mr. Wilson, who had been at Zambeze at the same time with myself, shaping our course for the Great lake, which lies rather more than 200 m. SW from the town we had visited, in lat. $20^{\circ} 20'$. We reached the lake after three weeks' travelling, during which we crossed the large river Zonga in canoes. This river runs out of the lake towards the E, and travelling to the lake you ascend it from the point at which

it is struck, after crossing the desert 320 m. At the point where we crossed our waggons by means of canoes, the river was at least 400 yds. broad and very deep; this was about 50 m. below the lake. At the lake we met Messrs. C. and T. Green and Mr. Edwards, who were just ready to start on an expedition round the lake, partly for the purpose of elephant-shooting, but chiefly to endeavour to discover Lebele, the chief of a powerful Makoba tribe living some distance beyond the lake, a few m. N of W. These gentlemen we accompanied, and, after making the circuit of the lake, which we found to be at least 60 m. in length by 14 m. in breadth, we proceeded up the Teonge, a very large river flowing into the lake on its W side. The natives say this river comes from Lebele. At the time we ascended it, it had overflowed its banks for some miles on each side, and we could not, therefore, ascertain its actual breadth. We proceeded up this river about 150 m., in the course of which we passed through the poisonous fly in two or three places without being aware of the danger. We should have got up much further, and it is probable have discovered Lebele, the chief we were in quest of, but our oxen and horses began to die, and we were compelled reluctantly to return as quickly as possible towards the lake: when I started from the lake I had 37 oxen, but when I got back the number was reduced to 22. With these I contrived to get as far as Tsapo's, a petty chief living on the banks of the river Zonga, about 300 m. from the lake; from which all my waggons were conveyed in canoes, the freight paid to the chief of the lake being ten bars of lead. Only fancy a river being navigable for that distance in the interior of South Africa. Here my last ox died. I omitted to say in the proper place, that while I and Mr. Welm were at the Zambeze, 11 Portuguese guns were brought to us by the natives to be repaired, but this we could not undertake, the locks being of a different construction to ours. I wanted to purchase one of these weapons, but the natives refused to part with it. I should have mentioned also, that the Portuguese are carrying on a thriving trade with Lebele for slaves and ivory. They pay for these in the same description of goods as they trade with at the Zambeze. The year before last, the Portuguese traders sent presents to the chief of the lake, promising him a visit the year following. This promise, however, was not kept, probably having heard that every season there were at the lake a good many English, whom they endeavour in their trading enterprises most carefully to avoid."

NGARI, a district of Tibet, at the sources of the San-pu, to the N of Nepal.

NHA-TRANG, a prov. of Annam, in the S part of Cochin-China, bounded on the N by the prov. of Phuyen, on the E by the China sea, on the S by the prov. of Bin-thuon, and on the W by Camboya. It contains a town and port of the same name, at the entrance of a river also named Nha-trang, into a bay of the China-sea, and 30 m. S of Hone Cohe. The port is safe and completely sheltered on all sides.

NHAURGHUR, a town of Hindostan, in the prov. of Malwa, district and 75 m. ESE of Kota.

NHENGARHYBAS, a numerous tribe of Indians, who inhabit the island of Marajo, prov. of Para, Brazil. They were brought to some extent to the profession of Christianity by the Jesuits. Fishing and navigation form their chief employments.

NHO, or NOUH, a town of Hindostan, in the prov. and 54 m. NW of Agra, district and 33 m. WSW of Aligar near the l. bank of the Jumna. It has extensive salt-works.

NHUNDIAQUARA, a river of Brazil, in the prov. of São Paulo, which runs S and throws itself into the bay of Paranaguá, opposite Antonina.

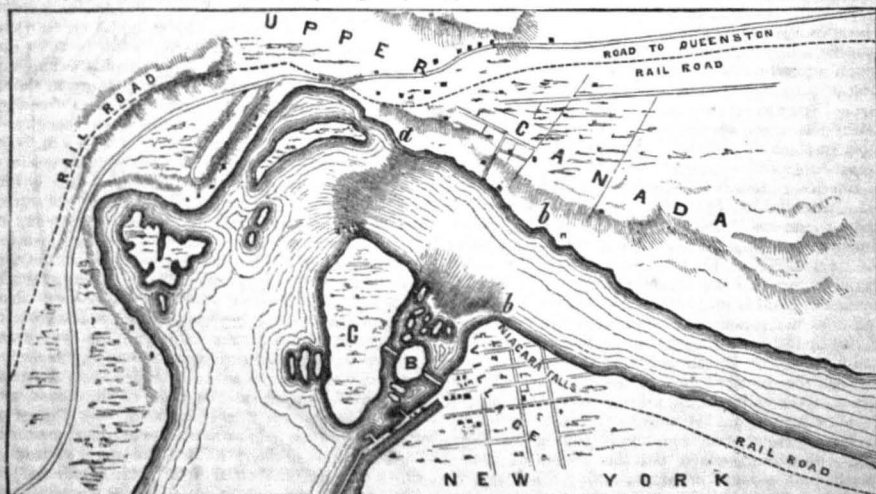
NIAB, a town of Arabia, in Yemen, in the territory and 60 m. NW of Abu-Arishi, and 9 m. from the Arabian gulf.

NIAGARA, a river or rather a strait flowing from the NE end of Lake Erie into Lake Ontario, and forming the boundary, throughout its course of about 36 m., between the United States territory and Canada. The river as it flows from Lake Erie is about $\frac{3}{4}$ m. wide, and from 20 to 40 ft. deep. It has a rapid current of about 8 m. an hour for the first 3 m., and then assumes a smooth and lake-like placidity, which it retains till within 1 m. of the great falls. At 5 m. from Lake Erie it begins to expand, till it becomes more than 8 m. in width measured across Grand island. Below Navy island it is compressed to a breadth of $2\frac{1}{2}$ m. At the falls, it is $\frac{3}{4}$ m. wide; but below it is immediately compressed to a $\frac{1}{4}$ m., and is 250 ft. deep. At two m. below the falls, it becomes comparatively smooth, but flows with amazing velocity in a deep wall-sided valley or huge trench to Lewiston, having a descent of 104 ft. from the falls to that point, a distance of 7 m. From Lewiston to Lake Ontario, its fall is 2 ft., in a like distance of 7 m.; and the sides or banks of the river become gradually lower, until on approaching Lake Ontario, they reassume the level character they presented at the emergence of the stream from Lake Erie. By means of an embankment, constructed parallel with the shore along the margin of the river, the level of the surface of Lake Erie is maintained over a distance of several miles above that of the descending stream; and this embankment forms a portion of the Lake Erie canal. Lake Erie is situated upon horizontal strata, in a region elevated about 300 ft. above the country which contains Lake Ontario. The descent which separates the two countries is in some places almost perpendicular; and the immense declivity, formed by an interruption in the general level of these calcareous strata, occasions in the course of the N. the most stupendous cataract in the world, as well as the great falls of Cheneseco. This remarkable line of distinction generally runs in a SW direction, from a place near the bay of Toronto, on the N side of Ontario, round the W angle of the lake; whence it continues its course generally in an E direction, crossing the river of N. and the Cheneseco river, till it is lost in the country towards Seneca lake; but as the difference of level is spread over an easy slope of 10 m. and does not amount to more than 330 ft., or 1 ft. of rise in 160 ft., the variation in the surface is not easily detected by an ordinary observer passing through the country. Above the falls there is literally no river-valley at all, as the river flows almost flush or level with its banks. The waters of this cataract formerly fell from the N side of the slope, near the landing-place, but the action of such a tremendous column of water, falling from such an eminence through a long succession of ages, has worn away the solid stone for the distance of 7 m., and formed an immense chasm which cannot be approached without horror. Down this awful chasm, the waters are precipitated with amazing velocity; and such a vast torrent of falling water communicates a tremulous motion, which is sensibly felt for some poles round, and produces a sound frequently heard at the distance of 20 m. The height of the banks renders the descent into the chasm difficult; but a person, after having descended, may proceed to the base of the falls, and may walk in perfect safety a considerable distance between the precipice and the descending torrent. The river at the falls—which occur about 21 m. below Lake Erie, and 14 m. above Lake Ontario—is about 743 yds. wide, and the perpendicular pitch is 150 ft. in height. In the last $\frac{1}{4}$ m., immediately above

the falls, the descent of the water is 58 ft.; and it appears that the water falls about 273 ft. in a distance of about $7\frac{1}{2}$ m. At 4 m. N of the town of Buffalo, near the E extremity of Lake Erie, we come to the village of Black Rock, where the boundaries of the lake contract, and its waters begin to pour themselves out through the sluiceway of the N. The river is at this place about a $\frac{1}{2}$ m. broad,—a dark, deep, hurrying stream. Opposite Black Rock, on the Canada side, is the village of Waterloo, to which there is a ferry. There is also a road on the American side, from Buffalo to the falls, a distance, either way, of about 15 m. From Waterloo we pass on by a level road close on the W bank of the N., and observe that the river continually becomes wider, presenting in its course Squaw island, Snake island, and Strawberry island, all near the American side, and at length it divides into two streams which sweep round Grand island several miles in length, and containing 11,200 acres covered with wood. At the lower extremity of Grand isle lies Navy isle celebrated in the annals of Canadian rebellion. They then unite again, forming one stream as before, only increased in breadth and swiftness. And now the interest thickens, and the whole scene becomes full of spirit and meaning. Here, about 3 m. from the falls, you see the white-crested rapids tossing in the distance before you; and even in the most unfavourable state of the weather, you hear the voice of the cataract pervading the air with its low, monotonous, continuous roar. From this point too you see a column of mist rising up like a smoke in distantly burning woods, marking the locality of the sublime scene over which it is immediately hanging. A mile or two passed, we turn a little from the road to the r., in order to have a near view of the rapids, occupying the whole breadth of the river from shore to shore, and extending a $\frac{1}{2}$ m. back from the falls, formed by the rush of the entire body of waters down a rough bed the descent of which in the course of this $\frac{1}{2}$ m. is 58 ft. The view is something like that of the sea in a violent gale. Thousands of waves dash eagerly forward, indicating the interruptions which they meet with from hidden rocks by ridges and streaks of foam. In the extreme distance you distinguish the crescent rim of the British fall, over which the torrent pours and disappears. The wildness and the solitude of the scene are strikingly impressive. Nothing that lives is to be seen in the whole extent of the stream: nothing that values its life ever dares venture it here. Returning to the road, we ascend gradually till we come to a hotel. A footpath through the garden at the back of the house, and down a steep and thickly wooded bank, brings us upon Table rock (a),—a flat ledge of limestone forming the brink of the precipice, the upper stratum of which is a jagged shelf about a foot in thickness, jutting out over the gulf below. Here the whole scene breaks upon us. Looking up the river we face the grand crescent called the British or Horse-shoe fall, over which nearly seven-eighths of the whole body of water is supposed to pass. Opposite to us is Goat island (G), or Iris island, as the Americans now prefer to call it, which divides the falls, and lower down to the left is the American fall. "The height of the cataract is so much exceeded by its breadth, and so much concealed by the volumes of mist which wrap and shroud its feet; you stand so directly on the same level with the falling waters; you see so large a portion of them at a considerable distance from you; and their roar comes up so moderated from the deep abyss, that the loveliness of the scene at first sight is permitted to take precedence of its grandeur. Its colouring alone is of the most exquisite kind. The deep sea-green of the

centre of the crescent, where it is probable the greatest mass of water falls, lit up with successive flashes of foam, and contrasted with the rich creamy whiteness of the two sides or wings of the same crescent; then the sober grey of the opposite precipice of Goat island, crowned with the luxuriant foliage of its forest-trees, and connected still further on with the pouring-snows of the greater and less American falls; the agitated and foamy surface of the waters at the bottom of the falls, followed by the darkness of their hue as they sweep along through the perpendicular gorge beyond; the mist floating about, and veiling objects with a softening indistinctness; and the bright rainbow which is constant to the sun; altogether form a combination of colour, changing too with every change of light, every variation of the wind, and every hour of the day, which the painter's art cannot imitate, and which Nature herself has perhaps only effected here. And the motion of these falls, how wonderfully fine it is! how graceful, how stately, how calm! There is nothing in it hurried or headlong, as you might have supposed. The eye is so long in measuring the vast and yet unacknowledged height, that they seem to move over almost slowly; the central and most voluminous portion of the Horse-shoe even goes down silently." [*Greenwood*.] About a $\frac{1}{2}$ m. below the Horse-shoe fall, a commodious road has been cut down the side of the perpendicular cliff, and through the solid rock, to the river. Here we find a regular ferry (*b b*), and are conveyed in a small boat across the stream, now narrowed to a breadth of about 1,200 ft., to the American side. The passage is per-

fectly safe, and affords a superb view both of the falls above, and of the dark river below. The current is not very rapid, and near the American side actually sets up toward the falls. A small steam-boat plies in the rough water just below the falls, and carries passengers almost to the very sheet itself. We land almost directly at the feet of the American fall, and by walking a little way to the right, may place ourselves in its spray. Now look up, and the height will not disappoint you. It seems as if the "waters which are above the firmament" were descending from the heights of heaven, and as if "the fountains of the great deep were broken up" from below. The noise, which permits free conversation to those who are on the bank, is here imperative and deafening; resembling the perpetual rolling of near thunder, or the uninterrupted discharge of a battery of heavy ordnance, mingled with a strange crashing and breaking sound. The impression of superior height is gained, not so much from the fact that the American fall is actually 10 or 12 ft. higher than the British, as from your having a complete profile view of the one from brink to base, which you cannot well obtain of the other.—The village of Manchester is situated on the rapid just above the fall. A bridge is thrown boldly over the rushing and 'arrowy' rapid to a small island called Bath island (*B*), where there are one or two dwellings and a paper-mill; and from this spot another bridge runs with equal boldness to Goat island. The whole breadth of the space thus traversed is 1,072 ft. Geologists suppose, and with apparent reason, that time was when the N. fell over



the abrupt bank at Queenstown, between 6 and 7 m. below the place of the present falls, and that it has, in the lapse of unknown and incalculable years, been wearing away the gulf in the intermediate distance, and toiling and travelling through the rock back to its parent lake. "The 710,000-tons of water which each minute pour over the precipice of N., are estimated to carry away a foot of the cliff every year. Taking this average, and adopting the clear geological proof that the fall once existed at Queenstown, 4 m. below, we must suppose a period of 20,000 years occupied in this recession of the cataract to its actual site; while the delta of the Mississippi, nearly 14,000 sq. m. in extent,—an estimate founded on its present rate of increase, and on a calculation of the amount of earthy matter brought down the stream,—has satisfied Mr. Lyell in alleging that 67,000 years must

have elapsed since the formation of this great deposit began." [*Quarterly Review*.] The reader will be gratified by our subjoining a more finished description of this sublime scene from the pen of Mr. Dickens: "Whenever the train halted I listened for the roar, and was constantly straining my eyes in the direction where I knew the falls must be from seeing the river rolling on towards them; every moment expecting to behold the spray. Within a few minutes of my stopping I saw two great white clouds rising up slowly and majestically from the depths of the earth; that was all. At length we alighted; and then, for the first time, I heard the mighty rush of water, and felt the ground tremble underneath my feet. The bank was very steep, and was slippery with rain, and half-melted ice. I hardly know how I got down, but I was soon at the bottom, and climbing with two

English officers who were crossing, and had joined me, over some broken rocks, deafened by the noise, half-blinded by the spray, and wet to the skin. We were at the foot of the American fall. I could see an immense torrent of water tearing headlong down from some great height, but had no idea of shape, or situation, or anything but vague immensity. When we were seated in the little ferry-boat, and were crossing the swollen river immediately before both cataracts, I began to feel what it was; but I was in a manner stunned, and unable to comprehend the vastness of the scene. It was not until I came on Table-rock and looked—great heaven, on what a fall of bright green water!—that it came upon me in its full might and majesty." With this we may compare Sir T. Bonycastle's account of these falls, and the impressions created by them:—"You must descend to the very edge of the trembling rocky brink of the cauldron on the British side, immediately under the stairs, and 60 or 70 ft. below the narrow platform of the rock on which you have stood when you have reached the last of these stairs. This is not to be effected without some trouble, risk, and fatigue; but it repays all your exertion, for when you have reached the edge, close to the Rainbow or Split rock, you are as it were at once in a new world: chaos seems there to have never been disturbed by the regularity of nature, but reigns solemn and supreme. Place your back against the projecting, blackened, and slime-covered rocks, and look towards the mighty mass of vapour and water before you, around you, beneath you, and above you: hearing, sight, feeling, become as it were blended and confounded! You are sensible that you exist, perhaps, but in what state of existence has, for a few minutes, vanished from your imagination. The rocks vibrate under your feet. The milk-white boiling and mountain surge advances, swells up, subsides, recoils, lashes, and mingles with the thick vapour. An indescribable and terrific, dull yet deafening sound, shakes the air; your nerves feel the concussion, and the words of surprise which at length escape from your lips are inaudible even to yourself, so awfully stern is the uproar of the contending air and water in their conflict for mastery. The ideas which first struck me when I had recovered from this stupor of astonishment were those of being swept away by the foaming mountains, bubbling, seething in the huge cauldron at my feet; of being on the point of losing the sense of hearing, for my temerity in venturing to pry so nearly into the unattainable mysteries of nature; and of instant annihilation from the mass of overhanging black and beetling rock above my head, at an absolute height of nearly 200 ft. In fact I experienced the same sensations so beautifully described by Shakespeare in *Lear*, but from a reverse cause; so true is it that extremes meet. I became giddy and confounded by looking at and up to the dizzy scene, instead of glancing from the eye down towards an unfathomable abyss of air and water below. There are few visitors who venture to the 'imminent deadly breach' of the edge of the cauldron, and of the Split Rainbow rock. These form a huge mass, buried cables deep in the gulf, fallen headlong from above, rent by the fall in twain nearly to its base, wedged into the lip of the cauldron, and towering 20 or 30 ft. above the mountain-surge."

Volume of water. In an article in the *American Journal of Science*, Mr. G. R. Blackwell presents some calculations, from which it will appear "that the motive-power of the cataract of N. exceeds, by nearly fortyfold, all the mechanical force of water and steam power rendered available in Great Britain for the purpose of imparting motion to the machinery that suffices to perform the manufacturing labours for a large portion of the inhabitants of the world, including also the power applied for transporting these products by steam-boats and steam-cars, and their steam-slips of war, to the remotest seas. Indeed it appears pro-

bable that the law of gravity, as established by the Creator, puts forth in this single waterfall more intense and effective energy than is necessary to move all the artificial machinery of the habitable globe. Estimating the perpendicular descent of the waters of the grand cataract to be 160 ft., and making the usual allowance of one-third part for waste of effective power, in the practical application of water to water-wheels; and also estimating the power of a horse to be equal to a force that will raise a weight of 53,000 lbs. one foot high in one minute, which is Watt and Bolton's standard, we obtain the following results:

$$\frac{1,402,500,000 \text{ lbs. of water} \times 160 \text{ ft. of descent}}{33,000} = 4,533,334 \text{ horse-power, which is the measure of the mechanical force, or motive-power, that the waterfall of Niagara is capable of imparting. It has been estimated by Mr. Baines, in his } \} \\ \text{History of the Cotton Manufactures of the United Kingdom, of Great Britain in 1835, that the motive-power employed to operate the machinery of all the cotton-mills in Great Britain was then equal to that of about}$$

33,000 horses, imparted by the agency of steam;
11,000 waterfalls.
100,000 horse-power he estimated to be employed to operate the woolen, flax, and other mills, and mechanical operations.
50,000 horse power for propelling the machinery of steam-boats and coal-mines.

194,000 horse-power in the year 1835.

Supposing about 20 per cent. to have been added to this motive-power in the increase of locomotive engines for railways and steam-boats, as well as for various manufacturing purposes, since 1835, we add to this aggregate 39,000 horse-power more.

233,000 horse-power may be taken to be the aggregate of motive-power of all the steam engines and improved waterfalls of Great Britain, which, it will be perceived, is only 1-19th part of the effective water-power of Niagara falls.

When it is considered," continues Mr. Blackwell, "that the water-power of the cataract of N. is unceasing, by night as well as by day, and that the power, as calculated above, for practical purposes in Great Britain, is only applied, on an average, about 11 hours per day, during six days of the week, it may be assumed that the motive-power of N. falls is at least forty-fold of the aggregate of all the water and steam power employed in Great Britain, and probably equal to the aggregate of all the motive-power employed for mechanical purposes on this earth."

Railway-bridge at the Falls. In 1847-48, an American engineer of the name of Elett conceived and executed the bold design of throwing a suspension-bridge across the falls. It rests on wooden towers 50 ft. high, over which pass 14 wire-cables, of 1,115 wires in all. To these the bridge is suspended, and, it is said, is capable of sustaining 1,000 tons; but another bridge is now building over that already thrown across, to serve as a connecting link between the railroads of Canada and of the state of New York. The bridge will form a single span 800 ft. in length. It is established by ample experience that good iron wire, if properly united into cables or ropes, is the best material for the support of loads and concussions, in virtue of its great absolute cohesion, which amounts to from 90,000 to 130,000 lbs. per sq. inch, according to quality. The N. bridge will form a straight hollow beam of 20 ft. wide and 17 ft. deep, composed of top, bottom, and sides. The upper floor, which supports the railroad, is 24 ft. wide between the railings, and suspended to two wire cables, assisted by stays. The lower floor is 19 ft. wide, and 15 ft. high in the clear, and is connected with the upper one by vertical trusses forming its sides, and suspended on two other cables which have 10 ft. more deflection than the upper ones. The anchorage will be formed by sinking 8 shafts into the rock, 25 ft. deep. The bottom of each shaft will be enlarged for the reception of cast-iron anchor plates, of 6 ft. sq. These chambers will have a prismatic section, which, when filled with solid masonry, cannot be drawn up without lifting the whole rock to a considerable extent. Saddles of cast-iron will support the cables on the top of the towers. They will consist of two parts—the lower one stationary, and the upper one moveable, resting upon wrought-iron rollers. The saddles will have to support a pressure of 600 tons whenever the bridge is loaded with a train of maximum weight. The towers are to be 60 ft.

high, 15 ft. square at the base, and 8 ft. at the top. The compact hard limestone used in the masonry of the towers will bear a pressure of 500 tons upon every foot sq.

WEIGHT OF BRIDGE.	
Weight of timber.	910,130 lbs.
Wrought-iron and suspenders.	113,120
Castings.	44,332
Rails.	66,740
Cables between towers.	535,400
	1,678,622

WEIGHT OF RAILROAD TRAINS.	
One locomotive.	25 tons.
27 double freight cars, each 25 ft. long and of 15 tons gross weight.	405 —
Making a total gross weight of 430 tons, which will fall upon the cables when the whole bridge is covered by a train of cars from end to end; add to this 15 per cent. increase of pressure as the result of a speed of 5 m. per hour, which is a very large allowance.	61 —
Add weight of superstructure.	782 —
Total aggregate maximum weight.	1,273 tons.

The tension of the cables, which results from a weight of 1,273 tons, and an average deflection of 59 ft., is 2,240 tons. Since this assumed maximum tension can but rarely occur, it is considered ample to allow four times the strength to meet this tension—that is, 8,960 tons. But assuming 2,000 tons as a tension to which the cables may be subjected, five times the strength to meet it is allowed, and an ultimate strength of 10,000 tons provided for. For this purpose 15,000 wires of No. 10 will be required. At each end of the upper floor the upper cables will be assisted by 18 wire-ropes stays, and their strength will be equivalent to 1,440 wires; these deducted leave the number of wires in the four superior cables 13,560—the number of wires in one cable, 3,390—diameter of cable, 9½ inches. The railroad-bridge will be elevated 18 ft. on the Canadian, and 28 ft. on the American side, above the present surface of the bank, and above the present structure. It will be the longest railroad-bridge between the points of support in the world.

NIAGARA, a district of Upper Canada, consisting of the cos. of Lincoln and Welland, and a portion of that of Haldimand; and bounded on the N by Lake Ontario; on the E by the Niagara; on the S by Lake Erie; and on the W by the Gore and Talbot dists. It consists chiefly of table-land, on a foundation of limestone and freestone; and the soil, which is for the most part of clay and loam, is generally well-timbered. The principal rivers in the district are the Grand river, which flows into Lake Erie; and Welland river, an affluent of the Niagara. It is intersected also by the Welland canal. Near Port Colborne is a lofty eminence, named Sugar-loaf hill. Pop. in 1840, 31,549, since which it is supposed to have increased a fifth. The chief towns are Niagara and St. Catherine's. The former, which was formerly called Newark, and was for some years the capital of the county, is in the NE corner of a township of the same name, at the entrance of the Niagara river into Lake Ontario, 48 m. from Hamilton, and 36 m. from Toronto. It is the oldest town on the river; and contains 4 churches, and numerous neat houses, with a pop. of about 3,000. It was burnt by the American forces in 1813.—The township is bounded on the N by Lake Ontario, and on the E by the Niagara. Pop. in 1840, 2,109.

NIAGARA, a county in the NW part of the state of New York, U. S., comprising an area of 484 sq. m., bounded on the N by Lake Ontario, and on the W by the Niagara. The surface is diversified, but possesses considerable fertility. It is watered by the Tonawanda. Pop. in 1840, 31,132; in 1850, 42,224. Its chief town is Lockport.—Also a township in the

above-named co., on the mountain-ridge, and bounded on the W by Niagara river. It contains the American grand falls, Goat island, and some smaller islands. The surface is undulating, and the soil chiefly lime and gravelly loam. Pop. in 1840, 1,277.

NIAGARA-FALLS, a village of Niagara co. and township, in the state of New York, U. S., 297 m. W by N of Albany, on the E side of Niagara river, at the falls, and at the termini of the railroads from Buffalo to Lockport.

NIAGARA-FORT, a military post of the United States, at the mouth of the Niagara, opposite Massasanga fort, originally founded by M. de la Salle in 1679. It has recently been enlarged and strengthened.

NIAGUR, a town of Hindostan, in the prov. of Gundwana, 32 m. S of Omerkuntuc, and 210 m. ENE of Nagpur.—Also a town in the prov. of Agra, dist. and 15 m. ENE of Narvar, near the l. bank of the Sind. It has a fort.

NIAGUSTA, NIAGOSTOS, or NAUSSA, a town of Turkey in Europe, in Macedonia, in the sanjak and 48 m. WNW of Salonika, and 12 m. S of Vodina, near the source of a small river of the same name, an affluent of Lake Jenidja. It is inhabited by Greeks, whose chief employment consists in the spinning and the manufacture of silk.

NIAK, an island of the North Atlantic ocean, near the S extremity of Greenland, and 30 m. NW of Cape Farewell, in N lat. 59° 45', W long. 45° 40'.

NIALAM-DZOUNG, or NIALMA, a town of Tibet, in the prov. of Ndzany, 240 m. SE of Shagatze, and near the l. bank of the Nio-tchu.

NIAMREI, a town of Senegambia, in the kingdom of Kayor, 24 m. ESE of St. Louis. Pop. about 4,000.

NIANG-TCHU, a river of Tibet, in the E part of the prov. of Wei. It has its source in Lake Tziama-Yumtze, about 150 m. NE of Lassa; runs SSE; and joins the Yaru-dzang-bo, on the l. bank.

NIAN-TCHOU, a river of Tibet, which has its source near Mount Noldzing-gangdzang-ri, in the SE part of the prov. of Dzang; runs first SW, then NW; and joins the Yaru-dzangbo-tchu, on the r. bank, and near Shagatze. It has a course of about 150 m., and receives the Bainam-tchu on the l. Gialdzdzoung is the chief place on its banks.

NIAO-SUNG-KHY, or TA-MU-KHY, a river of the island of Formosa, in the Chinese prov. of Fokien. It is formed by several torrents; runs W; and throws itself into the bay of Tao-wan. It is crossed by a bridge locally named Kwei-khiao or Devil's bridge.

NIAS (PULO), an island of the Indian ocean, to the W of Sumatra, from which it is separated by a strait 66 m. in breadth. Its S extremity is in N lat. 0° 32', E long. 97° 8' 45". Its length from NW to SE is 75 m., and its breadth about 30 m. It is generally mountainous; and is intersected by several considerable rivers, which near their embouchures are of depth sufficient to receive vessels of considerable size. It has also several good ports, and the anchorage along the east coast is excellent. It is still very imperfectly known. Its hills and valleys appear well cultivated; and the soil is remarkable for its fertility, producing rice in great abundance, potatoes and other farinaceous roots. Cocoa-palms abound on the hills. The number of the inhabitants is estimated at about 200,000; they are divided into upwards of 50 small communities, each under the government of an independent raja or chief. The aborigines are of middle size, well-made, and robust, and in complexion resembling the inhabitants of the continent of Asia. In features they greatly surpass the Malays, and are said to bear some affinity in contour of countenance to the Greek. The women of this island are reputed the handsomest in the Asiatic archipelago. The dress of the men consists

of a *badja* or mantle, and a piece of cloth thrown across the shoulders and encircling the waist. Their favourite colour is red. They wear a profusion of ornaments in gold, consisting of necklaces, and earrings of extraordinary size, and on the head a circlet resembling a Persian tiara. The dress of the women consists of a petticoat secured at the waist by a chain of gold or copper, and descending below the knees. They adorn themselves with a profusion of jewels, and cover the hair, which is rolled up at the top of the head and fastened with a gold bodkin, with a netting of gold. The villages are situated chiefly on the summit of hills, and always in positions capable of defence. The houses are built of wood, and generally commodious. In the N part of the island they are detached, but in the Sare built close together, and form regular streets. Pigs and fowls form their staple subsistence. They use little rice, but employ in their diet large quantities of farinaceous roots. Cattle, buffaloes, and horses have been introduced into the N districts by the Malays. The natives of Nias are said to be sober and industrious; but they bear the reproach of being avaricious, obstinate, vindictive, and sanguinary. Their arms, consisting of the lance, sword, and buckler, they carry constantly, and use with much dexterity. In war they wear a tunic of strong leather, and a helmet of the same material ornamented with a bunch of black hair. Polygamy is permitted, but is seldom practised except by the chiefs. Adultery, murder, and theft are punished with death. Slavery is recognised both by law and custom. The principal exports are rice, pigs, poultry, and legumes. Iron, steel, tobacco, and coarse woollen stuffs, form the chief articles of import. In 1820, in compliance with the repeated solicitations of many of the principal chiefs of the island, Sir T. Raffles, then lieutenant-governor of Bencoolen, deputed Mr. Prince and Dr. Jack to visit this island, and to form there, if deemed advisable, one or more settlements in situations that might appear best adapted for the purpose. Their first object was to ascertain to whom the actual sovereignty of the island belonged, and whether there were any supreme authority competent to enter into terms with them for the whole; but they found that none such existed. To the king of Acheen the people of N. acknowledged no subjection, and it did not appear that his authority ever prevailed in the island. The whole country, it was found, had been immemorially divided among a number of independent chiefs, with whom it became necessary to form separate agreements. The N districts as far south as a port called Gunong-Lembo, had long considered themselves under the protection of the East India company, and had even been in the habit of hoisting the English flag, and making appeals and references to Natal,—an acknowledgment which was paid in consequence of assistance which had been afforded them against Acheenese pirates who infested their coasts, and at one time threatened a serious invasion. Proceeding to visit the principal parts, Mr. Prince and Dr. Jack invited the chiefs connected with each to a conference, the result of which was an agreement under which British settlements were made at the ports of Tello-Dalam and Lavago, and parties of sepoys landed to secure the respectability of the British flag. The interest which the island then possessed has in a great measure passed away with the cession of Bencoolen and our other settlements on the W coast of Sumatra; but the report of the mission addressed to Sir T. Raffles, an ably-written document, contains a minute account of the slave-trade carried on on this island, of which some notice may still be interesting. "All the evils," says the report, "arising from the imperfection of their civil institutions have

been aggravated and increased by the odious traffic in slaves. The greatest number of slaves has hitherto been exported from Lemenbawa and Tello-Dalam; those from the N parts of the island have been much fewer. It is by no means easy to get an exact account of their numbers; some endeavouring to extenuate and diminish it, and others being equally desirous of magnifying it, according as they wished to give us a favourable impression of their conduct, or a high idea of their wealth; and the very nature of the trade, in some measure, precludes exactness. From a comparison, however, of these different accounts, checked by an estimate of the number of vessels resorting thither, and the value of their imports, we are satisfied that the annual number exported has not fallen short of 1,500! According to some accounts, more than this have been carried from Lemembawa alone; but we think the above estimate will be found nearer the truth. They are purchased chiefly by Acheenese and Chinese vessels; the latter of which carry them to Padang and Batavia. The circumstances that attend this traffic are no less revolting to humanity than those which marked it on the coast of Africa. The unhappy victims, torn by violence from their friends and country, and delivered pinioned hand and foot to the dealers in human flesh, are kept bound during the whole course of the voyage,—a precaution which is considered necessary to the safety of the crew. In their own country, the Nias people rarely make use of rice as food, and are almost unacquainted with the use of salt. The sudden change of diet to which they are subjected on board ship, added to the confinement and dejection of mind, proves fatal to many. Of a cargo of 30 slaves, 20 have been known to perish before the conclusion of the voyage; and on a moderate calculation it may be estimated, that, of the total number purchased, one-fourth never reach their destination, but fall victims to the various circumstances above mentioned." The reporters go on to state that slavery is recognised by the laws and customs of the island; that it is the punishment ordained for certain crimes, and is permitted as the ultimate resource in cases of debt. "These customs," say the reporters, "have no doubt been much increased in severity by the temptation of an external demand, and are often employed on very slight pretences; but they are quite inadequate to account for the great numbers actually exported. We have abundant proof that the greater number are made slaves by open and actual violence. The rajahs had little hesitation in admitting the fact, but said the system originated with foreigners, and that the source of the evil was without. In fact the temptation of exorbitant gain, and the persuasion of the dealers who resort to the ports, prove too much for their self-denial, and induce the more unprincipled among them to have recourse to every means of fraud, stratagem, or violence to procure victims to their avarice." The majority of the slaves are made so by violence, or on very unjust pretences; for the reporters scarcely met with an instance in which the rajahs had a single slave on hand whose redemption or sale they wished to effect. The answer was uniformly, "We have none; but if you wish to purchase slaves, wait a few days, and you may have a hundred." On inquiring further how this was to be effected, they found that the rajahs had only to send notice to their agents among the interior rajahs, and any number were forthwith brought down bound. "The fact is, the arrival of the trading boats which takes place at a certain season, is the signal for universal rapine and violence throughout the interior; hostile tribes endeavour to entrap stragglers belonging to their opponents, and the most frivolous pretences are

resorted to where violence is not deemed expedient."

NIAUMELSASKAS, a cataract of the Lulea, in Sweden, in the prov. of Northern Bothnia. The breadth of the river here is 575 yds., and the depth of its fall 119 yds. In winter the congelation of the spray forms masses of ice, which, gradually rising to the height of the cataract, forms an arch over the fall. The name, denoting 'Hare's leap,' is derived from the frequency with which these animals have been seen on its verge.

NIAUX, a village of France, in the dep. of the Ariège, cant. and 2 m. SW of Tarascon-sur-Ariège, and 12 m. S of Poix. Pop. 950.

NIAWEGE, or **NIMWEGE**, a commune of Belgium, in the prov. of East Flanders, and dep. of Elene. Pop. 179.

NIAYE-MARIGOT, a town of Senegambia, in Western Bambuk, 21 m. NNW of Pisanía.

NAZEPETROVSK, a town of Russia in Europe, in the gov. of Perm, district and 87 m. E of Krasno-Ufmsk, on the l. bank of the Niaza, near its confluence with the Ufa. It has extensive iron-works.

NIBBIANO, a town of Austria, in Lombardy, in the prov. and 10 m. ESE of Como, district and 6 m. SSE of Erba.—Also a town of the duchy of Parma, in the district and 20 m. WSW of Piacenza, on the l. bank of the Tiddone. Pop. 720.

NIBE, a town of Denmark, in Jutland, in the stift and 13 m. WSW of Aalborg, on the S coast of the Lymfjord. Pop. 1,200.

NIBLEY (North), a parish of Gloucestershire, 16 m. SSW of Gloucester. Area 3,245 acres. Pop. in 1831, 1,562; in 1851, 1,133.

NIBTHWAITE, a township in the p. of Coulton, Lancashire, 7 m. N of Ulverston, on the Crake.

NIBU, a town of Japan, in the island of Nifon, and prov. of Fida, about 120 m. W of Jedo.

NICANDRO (SAN), a town of Naples, in the prov. of the Terra-di-Bari, dist. and 11 m. SSW of Bari, cant. and 5 m. W of Canneto. Pop. 2,900. It has 3 churches.—Also a town in the prov. of Capitanate, dist. and 14 m. NE of San-Severo, and 27 m. N of Foggia, on the W slope of Mount Gargano. Pop. 7,800. It contains 3 churches.

NICARAGUA, a state of Central America, bounded on the N by Honduras; on the NE by the Mosquito territory; on the E by the latter territory, and by the Caribbean sea from the mouth of the Escondido or Bluefield's river to the mouth of the San-Juan-del-Norte; on the S by Costa-Rica; and on the W by the Pacific from the gulf of Nicoya on the S, to the gulf of Fonseca on the N. Its pretensions to territory considerably exceed these limits, embracing the whole Caribbean coast from Cape-Gracias-a-Dios southwards to the lower or Colorado mouth of the San-Juan-del-Norte, and all that portion of the Mosquito territory lying to the S of the Rio-de-Segovia or Wanks river; and claiming as a boundary, with Costa-Rica on the S, a right line running from the mouth of the Rio-Salto-de-Nicoya or Alvarado flowing into the head of the gulf of Nicoya, and the lower mouth of the San-Juan. Were these pretensions admitted, the state would comprise a territory of about 39,000 sq. m.; and a pop. estimated in 1846 at 250,000.

Physical features.] The great physical features of this region are its two lakes and the two chains of Cordilleras. One of the latter, the Alto-Grande, runs from the Caribbean coast, near the bay of San Juan, along the Mosquito frontier, in a NNW direction, dividing the streams which flow eastwards into the Caribbean sea from those which descend by shorter courses westwards to the lakes of Nicaragua and Managua; and the other enters the state between

the head of the gulf of Nicoya and the basin of the great lake of Nicaragua; attains in Mount Orosi, nearly under the parallel of 11° N, an alt. of 5,200 ft.; and skirts the S coast, in a series of low ranges passing between the lakes of Nicaragua and Managua and the Pacific, at a distance from the sea of from 10 to 20 m., and terminating in the volcano of Consequina at the S entrance of the gulf of Fonseca.—The two great lakes of N. form a great inland basin 300 m. in length by 150 m. wide, with broad and undulating slopes, relieved only by a few isolated volcanic cones, and the long ranges of hills along the shores of the Pacific. The lake of Managua approaches within 4 or 5 leagues of the Pacific, and has an alt. of 156 ft. above its level; but between its N extremity and the sea lie the magnificent plains of Leon and El-Conejo, in the midst of which rise the pyramidal forms of the volcanic mountains, Ajusco, Telicce, and El-Viejo. On its SW shore stands the city of Santiago-de-Managua. See **MANAGUA** (LAKE OF). The lake of Nicaragua, at the lower alt. of 128 ft. above the Pacific, and 120 ft. 9 in. above the Atlantic, is a considerably larger body of water, being estimated by Mr. Squier at 120 m. in length, and 50 or 60 m. in breadth. The sole outlet to this great body of water, and the whole interior basin of N. is the river San-Juan-del-Norte, which flows from the SE extremity of the lake of Nicaragua to the Atlantic at Grey-town. See article **JUAN** (SAN). On the S shore of this lake stands the ancient city of Granada, the most important commercial point in the republic; and on the same shore, at a distance of 40 m., is the city of Nicaragua or Rivas.

Climate.] The general temp. of the N. coast is nearly that of the W. Indies; the heat on the Pacific coast is however not so oppressive as on the Atlantic. In the interior, the temp. is mild, and the climate salubrious. The wet season commences in May, and lasts until November. Throughout this season the therm. ranges from 78° to 88°, sometimes sinking to 70° during the night. During the dry season, which continues from November to the end of April, the temp. is somewhat less, and the winds are occasionally chilling. At this period, nearly the whole country becomes parched; the exuberance of vegetation is checked; the cattle are driven to the hills and forests for pasturage; and the dense dank jungles are dried up.—Earthquakes are, as might be expected, of frequent occurrence in this volcanic region.

Natural productions.] On the higher table-lands about Segovia and Matagalpa, wheat, barley, and the rare fruits and vegetables of Europe may be grown abundantly, as well as Indian corn, and in some parts rice. In the lower plains and valleys the soil yields annually two crops of Indian corn, and the sugar-cane, banana, mandiocca, pine-apple, cocconut, sapota, plantain, and sweet potato are all raised or grow naturally. Indigo, cochineal, tobacco, vanilla, cotton, cocoa, sugar, and coffee, are also, according to the district, capable of the finest cultivation. Of the various small states into which Central America is now divided, N., in point of natural gifts, appears to be the richest. Commencing the route from the gulf of Nicoya, on the Pacific, we find that at this point pearls are fished, and that a shell-fish, somewhat like a large garden-snail, is here found which yields a bright red or purple dye. Here also is the mountain Aguacate, in which the few geologists who have visited Central America have asserted immense wealth lies buried, the localities of which are evident. The most important silver-mines at present known in N. are those of Dipilita, in the N part of the republic. Their produce in three years was 17,300 lbs. Passing on towards the plain of Nicaragua, the fields are covered with high grass,

studded with noble trees and herds of cattle. Cocoa, indigo, rice, Indian corn, bananas, and cotton, are here produced, and mahogany, cedar, and pine abound in the forests. The quantity of indigo produced in the state seldom exceeds 1,000 seroons. Vegetables and garden produce are scarce about Leon, but more abundant at Granada. The mulberry grows remarkably well near the town of Diriamba. Proceeding across to the E side of the lake there are cattle-farms, on which are herds of from 10,000 to 40,000 oxen, bulls and cows. These farms are chiefly located in the district of Chontales, which stretches between the E side of the lakes as far as San-Miguelito within a few leagues of the San-Juan. Horses and mules are bred for riding and for burden, and are occasionally exported to the W. Indies. Sheep are reared on the upper plains, and swine are kept for flesh. An Englishman from one of the W. India islands informed Mr. Stephens that but for the uncertainty of labour he could manufacture sugar at his estate on Lake Leon at one-fourth its cost in the W. Indies. It is sold in Nicaragua for 1½d. per lb., and indigo can be raised for 2s. per lb. The cochineal plantations in some parts yield two crops each season. The plain of Leon is said to be characterized by a richness of soil not surpassed by any land in the world, yet it remains in primeval desolation. Mr. Stephens is apprehensive that this region might prove too beautiful even for British or American energies not to relax beneath its influence. "It may be questioned," he observes, "whether, with the same scenery and climate, wants few and easily supplied, luxuriating in the open air and by the side of this lovely lake, even the descendants of the Anglo-Saxon race would not lose their energy and industry." Leaving the lakes and descending the river San-Juan to the Atlantic, each bank is covered with valuable wood of all sizes and descriptions, and the land, according to Mr. Bailey, is of prodigious fertility. Amongst other products this river abounds with manatis,—an animal between a quadruped and a fish, affording excellent food and strikingly effectual as a speedy cure for scorbutic or scrofulous disorders. The length of this animal is from 8 to 12 ft., and it weighs from 500 to 800 lbs. The country appears to have but one want, and that is that it should become the seat of capital and enterprise. At present "from a fertility of soil capable of maintaining millions little more is drawn than the sustenance of 250,000 inhabitants" [Bailey]. The anarchy which continually prevails within the state neutralizes any attempt to advance public works or develop its commerce; and yet this most impotent government betrays every desire to exercise sway over its industrious and peaceable neighbours.

Administrative divisions.] The republic is divided into departments, each of which is subdivided into judicial partidos or districts. These departments and their pop., according to the boundaries claimed by the government of N., are

	Pop.	Cap.
Department Meridional	20,000	Nicaragua.
— Oriental	95,000	Granada and
— Occidental	90,000	Managua.
— Septentrional of)	40,000	Leon.
Matagalpa		Matagalpa.
— Septentrional of)	32,000	Segovia.
Segovia		
Nicoya or Guanacaste	7,000	Guanacaste.

Population.] The pop. consists of about 25,000 Whites, 15,000 Negroes, 80,000 Indians, and 130,000 Mestizos. The latter class is sprung from the marriages of civilized Indians of Nicaragua with Spanish or Negro races. Most of them live in towns, going 2, 4, or 6 m. daily to labour in the haciendas and

ranchos which are scattered pretty equally over the country. Their cottages are usually of canes thatched with palm and open at the sides. Mr. Squier says the women of pure Spanish stock "are very fair, and have the *embonpoint* which characterises the sex under the tropics. Their dress, except in a few instances, is loose and flowing, leaving the neck and arms exposed. The entire dress is often pure white, but generally the skirt is of some flowered stuff. Satin slippers, a red or purple sash wound loosely round the waist, and a rosary containing a little golden cross, with a narrow golden band or a string of pearls extending around the forehead and binding the hair, which often falls in luxuriant waves upon their shoulders, complete a costume as novel as it is graceful and picturesque. To all this add the attractions of an oval face, regular features, large and lustrous black eyes, small mouth, pearly white teeth, and tiny hands and feet, and withal a low but clear voice, and the reader has a picture of a Central American lady of pure stock. Very many of the women have, however, an infusion of other families and races, from the Saracen to the Indian and the Negro, in every degree of intermixture. Nor is the Indian girl, with her full lithe figure, long glossy hair, quick and mischievous eyes, who walks erect as a grenadier beneath her heavy water-jar, and salutes you in a musical, impudent voice as you pass,—nor is the Indian girl to be overlooked in the novel contrasts which the *bellos sexos* affords in this glorious land of the sun."—The priests exercise considerable influence over the populace. Education is generally much neglected. Few towns have more than one or two public schools, each under a single teacher, and many considerable villages have not a single teacher of any grade. Granada and Leon are the seats of universities, but the salaries of the professors seldom exceed 200 dollars.

Government.] The government of the republic is composed of a house-of-deputies, and a senate. The legislative assembly holds its sittings at Managua. The senate consists of 2 members from each of the 6 districts or departments into which the state is divided, each of whom must have been resident 5 years in the state, have attained the age of 30, and possess property to the value of 1,000 dollars. They hold office for 4 years. The representatives are apportioned on the basis of 1 for every 20,000 inhabitants. They may be either seculars or ecclesiastics, but must have resided one year in the state, and are only eligible for two consecutive terms. All males of the age of 20, born in the country, are electors. The executive power is vested in a supreme director, who is elected directly by popular vote for the term of two years.—The judiciary consists of a supreme court, whose members are named by the house-of-representatives, 3 for each department, 1 of whom in each district is presiding judge. The president judges meet annually in the capital, to constitute a court of final resort.

NICARAGUA, sometimes called RIVAS DE NICARAGUA, a city of the republic of Nicaragua, agreeably situated in a fertile district in the department Meridional, 40 m. SSE of Granada, at the distance of little more than a league from the W coast of the lake of Nicaragua, at about 100 ft. above the level of the lake. The houses are only one story in height, but those of the old Spanish inhabitants are substantially built of stone. Pop. 6,000.

NICARAGUA (LAKE OF), a great fresh-water lake of Central America, extending in the direction of SE and NW, from about 1 m. to the S of the 11th parallel of N lat., to 12 or 14 m. N of the 12th parallel. Its extreme length is about 90 m.; its greatest breadth about 40 m.; mean, 30 m. Mr. Lawrence estimates its area at 3,150 sq. m.; and

Mr. Baily assigns to it, as the result of a series of careful levellings, an elevation of 128 ft. 3 in. above the level of the Pacific. Near the shores, that is to say about the distance of 100 yds. from the beach, there is generally a depth of 2 fath. water; in other parts between 5 and 15 fath. are found. Mr. Lawrence, who coasted both its N and S shores, found an average depth of 6 to 7 fath. for several miles from shore. He also found it liable to frequent sharp gales. Several groups of islets and some islands diversify the surface; of the latter Zapatera (*a*), Ometepe (*b*), and Madera (*c*), are the largest. Zapatera is mountainous, rising nearly to 2,000 ft. in height, and uninhabited. Ometepe is inhabited by an industrious race of Indians, who raise maize, and possess some cattle. Madera is joined to Ometepe by a neck of land, so low that when a strong breeze sets in from the NE it is frequently overflowed; in form it is a huge mound of more than 4,000 ft. high, everywhere thickly cov-

ered with wood, affording a supply of excellent cedar timber of great dimensions. On Ometepe is a remarkable mountain that, viewed from the nearest shore, presents the figure of an almost perfect cone, rising from the surface of the water at an elevation of more than 5,100 ft. Unlike the adjacent Madera, it is bare of wood, showing only a few trees scattered here and there, but from its symmetrical proportions, is a grand and pleasing object, distinguishable by mariners on the Pacific at a great distance. Solentinami (*d*) and Sapote (*e*) are islands much smaller than the preceding, not occupied, but cultivable. The other small groups merit no particular notice. The NW extremity of the lake of N. approaches within 18 m. of the SE extremity of that of Managua, and appears to be connected with it by the Rio Tipitapa or Panaloya (*iii*), which is, in fact, for an extent of 12 m., an estuary of Lake N., and at the head of this estuary approaches within 5 m. of Lake Managua.



Projected canal lines. There can be no doubt as to the fitness of both lakes for being navigated by ships. The eligibility of the route by this lake, as the line of the great oceanic intercommunication, will depend entirely upon the nature of the country across which the canals connecting it with the Atlantic and Pacific must be carried. Only one line of navigation from the Atlantic to Lake Nicaragua has as yet been examined or even thought of,—that by the river San-Juan, which has its outlet about 300 m. NW of Chagres; see articles *JUAN (SAN)* and *GREY-TOWN*; but several alternate lines from the lake to the Pacific have been proposed. One of these, called Mr. Baily's route, was surveyed by that gentleman at the expense of the Nicaraguan government. It extends from the bay or port of San-Juan-dei-Sud (*h*) on the Pacific, to a point on the lake S of the city of Nicaragua (*m*), and is 154 m. in length.—The second, called Prince Louis Napoleon's route, passes from Lake N. up the river Tipitapa, across Lake Managua, and thence across the isthmus to Realajo (*n*). The distance from Lake N. to the Pacific by this line is 104 m. Between Lake N. and the superior lake of Managua is a nominal distance of 18 m.; but, as already noticed, the connecting stream, the Rio Tipitapa, is, in fact, for an extent of 12 m. an estuary of Lake N., and for

that distance may probably be so cleared out as to be made navigable. From the head of this estuary to Lake Managua, a distance of 5 m., there is a rise of about 25 ft. The greater part of this rise is abrupt, at a point about 1 m. below the lake called the falls of Tipitapa. Very little water passes here except in the rainy season, and in the dry season the stream is sometimes wholly suspended. The rock is apparently a soft calcareous breccia, easily worked. A short section of canal is therefore indispensable here, extending from the lake to the falls, a distance of 1 m. Below this to San Pasquiel, at the head of the estuary from Lake N., the bed of the stream is deep, and the banks abrupt and high, forming a natural canal, which, according to Mr. Squier's report, only needs proper dams and locks at its lower extremity to furnish a channel adequate to every purpose of navigation. Between the NW extremity of this lake and the Pacific are the great plains of Leon. Three lines across this plain have been suggested: 1st, by the E. shore of the lake to the small port of Tamarinda (*o*); 2d, by the same shore to the well known port of Realajo (*p*); and 3d, by the upper shore of the lake to the Gulf of Fonseca or Conchagua. See articles *FONSECA* and *MANAGUA*. All these lines are within the territory of the state of NICARAGUA.

Another line, through the territory of the state of Costa Rica, ascends the bed of the river Sapoá, which enters the lake of N. at its S extremity with a stream of 200 yds. in width, and from 2 to 3 yds. in depth, for 8 m., and then crosses the isthmus or low coast, the highest point in which has an alt. of only 270 ft. above sea-level, to the bay of Salinas, a further distance of 7 m. See SAPOÁ. A fourth line which has been suggested by Sir Edward Belcher, coincides with that of Prince Louis Napoleon as far as Lake Managua, but crosses from its basin, partly by a canal, partly by the bed of the river Estero, behind the coast-range, into the gulf of Fonseca. See MANAGUA.—Mr. Squier, late United States *Chargé d'Affaires* in Nicaragua, officially publishes as the length of the route by Lake N., &c., across the American continent, from the Atlantic to the Pacific:

River San Juan	90 m.
Lake Nicaragua, necessary to be traversed	110
Lake Tititapa	18
Lake Managua	55
From Lake Managua to the port of Realajo	40
	308

The height of the various lakes to be passed and the elevations of land is thus given:

	Above Atlantic.	Above Pacific.
Height of Lake Nicaragua	147 ft. 9 in.	128 ft. 3 in.
Height of Lake Managua	176	156 11
Highest point of land to be passed	231 11	212 5

Mr. Squier is of opinion that the river San Juan cannot be made navigable for large vessels. It appears, however, that the line which has found favour in the United States, and for which a company has been announced, although it has taken no practical steps towards the realization of its gigantic scheme, is as follows:

From the San Juan on the Atlantic to Lake Nicaragua, partly by canal, partly by dams or river	119 m.
Across Lake Nicaragua to Rio Lajas (r)	56
From Rio Lajas to Brito (r), a port on the Pacific ocean, by canal	20
Total.	195 m.

The canal by this route, it is proposed, shall be on an average 17 ft. deep, 50 ft. broad at the bottom, and 79 ft. at the surface. It is calculated that 10 years would be required to complete it, and that the total expense would be, not £52,000,000, as stated by Mr. Squier, but £9,000,000. It would afford, when completed, a passage to vessels of the very first class and largest dimensions. This scheme comes into direct competition with another projected ship-canal across the isthmus of Darien, between the gulf of San Miguel on the Pacific and Caledonia bay on the Atlantic. An outline of the latter scheme is given in the article MIZCEL (GULF OF SAN). The supporters of the latter, or 'the Isthmus of Darien Ship-canal,' as it is called, argue, (1) That while San Juan del Norte on the Atlantic, and Brito on the Pacific, the two termini of 'the American Atlantic and Pacific Ship-canal' have insufficient capacity and depth of water, Brito having in fact no title whatever to the name of a harbour, Caledonia bay, Port Esocoes, and the channel of Sassardi, as constituting the terminus on the Atlantic side, have an extent of 11 m. of safe anchorage in all winds, with great depth of water; while the gulf of San Miguel, on the Pacific side, would hold the shipping of the world. (2) That while the American scheme requires 14 locks on the Atlantic side from San Juan to the rapids of Castillo and Toro on the lake, and 14 on the Pacific side from the lake to Brito, no locks are necessary in the isthmus of Darien scheme. (3) That while the distance across by the Nicaraguan project is 184 m.; by the Darien it is only 39 m. (4) That while the summit-level of the Nicaraguan line is 128 ft., to be locked up to on each side; the greatest depth of cutting necessary to the Darien line is 150 ft. and that for scarcely 2 in. (5) That while the length of canal necessary to the Nicaraguan scheme is 47 m., and of river to be deepened 91 m., the Darien contemplates only 25 or 30 m. of cutting, and no dredging or ceperping. (6) That artificial harbours, piers, and embankments are necessary in the one scheme; while no such works are required in the other. (7) That the Darien canal can be made navigable by ships of the greatest draught; while the Nicaraguan could not be employed by vessels exceeding 1,000 tons burthen. (8) That while the projection of the Nicaraguan scheme must encounter difficulties arising from disputed territorial boundaries, and various other grounds of delay and doubt, the concession from New Granada involves no disputed points. (9) That on the Nicaraguan line there are volcanoes in a state of activity; while no volcanoes are known to exist within some hundreds of miles of the line of the Darien canal. (10) That while the probable time necessary for transit from sea to sea would be 6 days in the course of the Nicaraguan line; transit will be effected by the Darien in from 6 to 8 hours.

NICARIA, or ICARIA, an island of the Grecian archipelago, 10 m. WSW of Samos, and to the NE of Naxia. Its loftiest point is in N lat. 37° 31' 15", and E long. 26° 2' 35". It is 27 m. in length from NE to SW, and about 3 m. in breadth. It terminates on the NE in Cape Phanari, and is covered in the centre with well-wooded mountains, but is other-

wise nearly barren. Its principal exports are timber, charcoal, wine, oil, and cotton. It contains several villages, of which the principal is Cachoria. It was noted in mythology for the fall of Icarus,—whence its name, and that also of the surrounding sea. Its pop. has been estimated at 1,500.

NICASTRO, a district and town of Naples, in the prov. of Calabria-Ultra, 19 m. WNW of Catanzaro, and 27 m. S of Cosenza, on the lower range of Monte Reventino, on the W side of the Apennines, and near the S. Ippoleto river. Pop. 6,000. It is enclosed by walls, and has a castle and several churches and convents; but the houses are straggling, and generally mean in appearance; the whole town and vicinity, however, has a romantic and picturesque character. Between N. and the gulf of Santa Eufemia the country is partly covered by a thick forest, and traversed by two rivers, the Angitola and the Amato, whose waters not having sufficient vent, render the soil marshy and the air humid, which never fails to generate diseases in the hot months. That part which is not inundated produces Turkey corn in abundance. In the low grounds there are large plantations of rice, and occasionally sugar-canes are grown. Olives, rising to the height of forest-trees, spread over all the upper tracts, but the oil is of a bad flavour, and used only in manufactures. A number of farm-houses and fine country-seats are scattered over the whole plain, particularly in the neighbourhood of N. This charming region—from which the confined waters might very easily be removed by a free issue—never experiences any of the rigours of winter: so soon as the autumnal rains have ceased, the softest and most equal temp. renders it a delightful abode. The mountains, on which are seen a great number of villages and detached dwellings, present a singularly pleasing aspect. The town was much damaged by an earthquake in 1638. In its vicinity are several thermal baths. This town is supposed by some to occupy the site of the ancient *Lisania*. The district comprises 8 cant.

NICAVA, a town of Japan, in the island of Nifon, and prov. of Yettsiou, about 120 m. NW of Jedo.

NICAVARI. See CAMORIA.

NICE, or NIZZA, a province of the Sardinian states, between the parallels of 43° 37' and 44° 19' N, and surrounded by Genoa, Monaco, the maritime Alps, the French dep. of Var, and the Mediterranean. Though commonly considered in Piedmont, and consequently in Italy, it can hardly be said to form a part of that country, being separated from it by the Alps, the grand boundary of Italy to the W. Its superficial extent is 1,750 sq. m., or 286,000 hectares, of which 75,000 are under cultivation; 20,000 under wood; and 16,000 are insusceptible of cultivation. Cultivation is confined for want of manure. The spade alone is used. Corn, beans, maize, and potatoes are grown. Its surface is for the most part composed of mountains and narrow valleys. In the N part there is little else than pasturage; but in the S, the greater exposure to the sun is favourable to the culture of the olive, the vine, and fruits. The amount of corn raised is small, and the number of cattle is not great; but bees are reared with success, and honey is made in large quantities. Several districts produce valuable timber. The wild boar and antelope are common, and game is abundant. Its pop., in 1821, was 95,222; in 1839, 112,428; in 1848, 118,377. A few manufactures, such as coarse woollens and netting, also soap made of olive oil, are conducted on a small scale; and there are iron and bronze foundries, and paper-mills.—The prov. is divided into the two districts of N. and Sospello, which are subdivided into 15 mandamenti, and 87 communes.

NICM, or **NIZZA MARITIMA**, the capital of the above prov., stands at the mouth of the small river Paglione, on the Mediterranean, 98 m. SW. of Turin, and 4 m. E. of the French frontier, in N lat. 43° 41', E long. 7° 16'. It is delightfully situated at the foot of an amphitheatre of hills covered with villas, gardens, and groves of olives, and orange and lemon trees. The lofty range of the Alps terminates the prospect on one side, and the Mediterranean on the other; while from the centre of the basin in which the town stands rises a steep and pointed rock, bearing aloft the ruins of an old castle, which adds considerably to the picturesque effect of the whole. N. is surrounded with a rampart, and divided into an old and new town. The streets of the former are crowded, narrow, and dirty; but those of the latter are tolerably straight and regular. The houses, particularly in the new town, and in the suburb of the Marble cross, are extremely neat. Their walls are frequently painted in fresco, which gives them a clean and cheerful appearance; and they are in general surrounded with gardens planted with orange and lemon trees, which are covered with fruit or with flowers during the greater part of the year. N. contains two public squares, one of which is surrounded with porticoes or open arcades, called the Piazza Vittoria, and is rather handsome. The other is bordered by a terrace, which serves at once as a public walk and as a mound or dike against the sea. The only public edifice worth notice is the cathedral. The pop. in 1838 was 33,811, exclusive of the military. The Nissareh, men, women, and children, are pronounced by a recent traveller to be "strikingly plain in their persons." They are generally small in stature, and of a muscular but not fleshy frame, with lively eyes and black hair. They speak a curious *patois* of Italian, French, Spanish, and Celtic.—N. is the see of a bishop, a suffragan of Genoa, and the seat of a royal court of appeal, a tribunal of commerce, a royal college, a theological seminary, and secondary schools of medicine and of law preparatory for the university, and a school of design. It possesses a theatre, public baths, coffee-houses, a library, 3 hospitals, 2 convents for education, and an English chapel and cemetery.

The harbour, which is protected by a mole, is spacious and secure, and is capable of admitting vessels of 300 tons. The bay is remarkable for its frequent heavy surf.—The trade consists chiefly in the export of the oil, wine, and silk of the neighbourhood; also of *liqueurs*, essences, and perfumery. Its port is free, and is the principal cause of its prosperity. As a frontier-town of France and Piedmont, considerable inducement is here held out to smugglers to introduce manufactured goods into those countries, and a premium of 20 to 30 per cent. is obtained by the contraband traders, according to the bulk and value of the article smuggled across their frontier. The free port has also prevented the establishment of manufactories of any importance. There are several lead mines in the neighbourhood of N.; that of Tende yielded the largest proportion of silver, being 2½ to every 600; unfortunately this mine is not worked at present, in consequence of some misunderstanding between the proprietor and the government.

The presumed but questionable efficiency of the climate in consumptive complaints long rendered N. a favourite place of resort on the part of emigrating foreigners, particularly English. Mr. Matthews, however, pronounces the climate of N. one of the very worst for individuals suffering under pectoral complaints. Its air is keen and piercing; and either the *bise* or the *marin*, the one bringing cold, the other damp, prevails. From meteorological observations

from 1806 to 1838, the greatest height of the barometer was 28·8·2, the lowest 26·11·6, the mean 27·11·8. Out of 36,135 observations of the therm., it rose once only as high as 92·5 Fahrenheit. The lowest point was 15° of Fah. The maximum of the hygrometer was 100°, the minimum 17°, and the mean 59°. The *tramontane*, or N wind, seldom descends into the lower plains of N., but sweeps from the mountain-summits into the sea, coming into contact with the latter, about a league from the land, which is rendered apparent by the turbulence of the water. The E wind is dry and cutting; when mingled with moisture, it is a SE wind turned off to the W by the Apennines. A S wind is very relaxing, and brings rain or tempest. The SSW wind, or *lebec* as it is called, is prejudicial to animal and vegetable life. Dew is abundant, but mists are extremely rare.—The soil of the environs of N. is an aggregate of chalk, clay, and sand, with round smooth stones, thrown up into hills, mounds, and mountains of the secondary and tertiary order, covered with diluvial soil.

History. The early inhabitants of N. were probably Celtic Gauls, and appear to have ranked very low in the scale of civilization, which, however, their intercourse with the Phœnicians and Etruscans, who traded with this coast, as well as the establishment of the Phœnicians, tended to improve. It is supposed that the Phœcian colony of Marseilles, after driving the natives to the hills, founded N. about the time of Tarquin. The only remains of this period are some coins, bearing the bust of Diana, and on the reverse a bull; the former was the tutelary deity of Marseilles, the latter its emblem of agriculture. N. became of some consequence after the Christian era, and Strabo mentions its arsenal, and numerous ships and machines of war which were used by the Romans in conquering Provence. In the 12th cent. N. was allied to Pisa and Genoa, and thus formed a municipal commonality; but the kings of Aragon having become masters of Provence, established their supremacy over N. Provence, however, having passed from the Aragonese to the dominion of the counts of Anjou, the county of N., in 1246, became subject to the Anjou dynasty of Provence and Naples. During the war of the disputed succession of Queen Joanna I. of Naples, the people of N. applied for protection to Amadeus VII. of Savoy; and in 1402, King Ladislaus of Naples, and his competitors of the house of Anjou, renounced their claims upon N. to Amadeus VIII. duke of Savoy and Piedmont. The county of N. has remained ever since, with brief interruptions of temporary conquest, subject to the house of Savoy, under which it has attained its present state of prosperity. The county of N., although subject to the royal constitution or legislative code of the Sardinian monarchy, still retains some local registrations and privileges, which date from the time of its Angevin sovereigns. It has its own senate or supreme court of justice, and has under its jurisdiction the provs of Oneglia and St. Remo.

NICETTA, a village of Afghanistan, on the r. bank of the Cabul river, near the confluence of the Lunye, and about 12 m. NE of Peshawar.

NICEY, a village of France, in the dep. of the Cote-d'Or, cant. and 3 m. WNW of Laignes, near the Vevre. Pop. 700.

NICHOL, a township of Upper Canada, in the Wellington district, intersected in the N by the Grand river. It possesses excellent soil, and abounds with fine timber. Pop., chiefly Scotch, 1,019.

NICHOLAS, a central county of the state of Virginia, U. S., comprising an area of 1,430 sq. m., drained by Gauley and Elk rivers, and bordered on the SW by the Great Kanawha river. Pop. in 1840, 2,515; in 1850, 3,963. It contains a village of the same name. Its cap. is Summersville.—Also a co. in the NE part of the state of Kentucky, containing a superficies of 350 sq. m., watered by Licking river and its branches. Pop. in 1840, 8,745; in 1850, 10,360. Its cap. is Carlisle.

NICHOLAS (SAINT), a parish in Devonshire, 5½ m. E by S of Newton-Abbot. Area 790 acres. Pop. in 1831, 1,178; in 1851, 1,297.—Also a p. in Glamorganshire, 6 m. W by S of Cardiff. Pop. in 1831, 351; in 1851, 414.—Also a p. in Pembrokeshire, 4½ m. W by S of Fishguard. Pop. in 1831, 315; in 1851, 355.—Also a p. in the isle of Wight, adjacent to Newport. Area 410 acres. Pop. in 1831, 317;

in 1851, 265.—Also a p. in Suffolk, $5\frac{1}{2}$ m. NW of Halesworth. Area 450 acres. Pop. in 1831, 101; in 1851, 94.—Also a p. in the isle of Thanet, Kent, $6\frac{1}{2}$ m. WSW of Margate. Area 3,660 acres. Pop. in 1831, 726; in 1851, 604.—Also a p. in co. Wexford, 4 m. N of Wexford. Area 1,213 acres. Pop. in 1831, 311; in 1851, 240.

NICHLASTON, a parish in Glamorganshire, $1\frac{1}{2}$ m. NE of Penrice. Pop. in 1831, 92; in 1851, 132.

NICHOLASVILLE, a village of Jessamine co., in the state of Kentucky, U. S., 36 m. SE of Frankfort, on a small branch of Kentucky river. Pop. in 1840, 632.

NICHOL FOREST, a chapelry in the p. of Kirk-Andrew's, Cumberland, $10\frac{1}{2}$ m. NE by N of Langtown, and E of the Esk. Area 7,302 acres. Pop. in 1831, 907; in 1851, 744.

NICHOLS, a township of Tioga co., in the state of New York, U. S., 8 m. SW of Oswego, and 170 m. WSW of Albany. The surface is hilly, except on the Susquehanna, by which it is bounded on the N. The soil consists chiefly of gravelly loam. Pop. in 1840, 1,986.

NICHOLSON, a mountain of Australia Felix, in the district of Portland bay, near the Cockajemmy lakes.—Also a large river of N. Australia, which flows into the gulf of Carpentaria, to the W of the river Albert.

NICHOLSON, a township of Luzerne co., in the state of Pennsylvania, U. S., 161 m. NE of Harrisburg, intersected in the N by Tunkhannock mountain. Pop. in 1840, 658.

NICHOLSON (PORT), a noble harbour in the district of Wellington, on the SW coast of the North island of New Zealand, in S lat. $41^{\circ} 16' 46''$, E long. $174^{\circ} 47' 29''$. It has an entrance of about $\frac{3}{4}$ m. in width, between Barrett reef and Pencarrow-head. The width of the passage varies from 1 m. to $1\frac{1}{2}$ m., with a depth of water varying from 6 to 14 fath. Evans bay is an arm stretching to the S, and Lambin harbour another arm stretching SW. Independently of these bays, the port forms a land-locked basin about 5 m. in diam. The lower valley of the Hutt river has its base on the shores of this harbour, and its apex at a gorge about $6\frac{1}{2}$ m. to the N, where the hills bounding the valley of the river on the E and W approach close to each other. To the N of the gorge, through which the river rushes rapidly for about $1\frac{1}{2}$ m., the hills recede from each other, leaving a valley between them about 8 m. long, and 2 m. broad. See articles NEW ZEALAND and WELLINGTON.

NICHSVILLE, a village of Hopkinton township, St. Lawrence co., in the state of New York, U. S., $21\frac{1}{2}$ m. NNW of Albany, on the E branch of St. Regis river. Pop. in 1840, 125.

NICKER, an islet of the Antilles, in the group of the Virgin islands, to the NE of Virgin Gorda, in N lat. $18^{\circ} 25'$, W long. $64^{\circ} 5'$. It is 6 m. in length, and about 3 m. in breadth.

NICKOJACK, a creek in the state of Georgia, U. S., which issues from an extensive lake, and has at its exit thence a width of 60 ft.

NICKOL'S BAY, an indentation of the NW coast of Australia, in De Witt's Land, between Capes Lambert and Preston, in N lat. $20^{\circ} 38'$, E long. $116^{\circ} 47'$.

NICOBAR ISLANDS, a group situated in the SE quarter of the bay of Bengal, between the parallels of $6^{\circ} 40'$ and $9^{\circ} 30'$ N, and the meridians of $92^{\circ} 50'$ and 94° E, almost equally distant from the Andamans and from Sumatra. The largest of the group is named Sambelong; but the two most visited by Europeans are called Carnicobar and Nancoury. There are 9 other islands of moderate size, besides a multitude of very small ones without any distinct appella-

tion. Most of these islands are hilly, and some of their mountains are of considerable elevation. The valleys and sides of the hills are so densely covered with cocoa and areca-palms that the sunbeams cannot penetrate through their foliage; and in some places these are so thickly interwoven with rattans and bush-rope, that they appear spun together. The islands are of course unhealthy, and absolutely pestilential to a European constitution; even the natives seldom live beyond 60 years. Buffaloes and other cattle, swine, dogs, and monkeys, are found on most of the islands; snakes and alligators are numerous. The number and variety of shell-fish is so great that here the most beautiful conchological collections might be made with very little trouble.—M. Chopard estimates the entire pop. of the archipelago at 8,000, of whom 2,000 inhabit Carnicobar. He is of opinion that they belong rather to the Hindu race, than to the Burmese or the Malayan, but that in the pop. of the S portion of the group there is an interfusion of Malay blood. Their language is polysyllabic. The inhabitants of the N. islands are of a copper colour, with small eyes, flat noses, large mouths, thick lips, and black teeth; they are well-proportioned, rather short than tall, with large ears. They have strong black hair; the men have little or no beard, and shave their eyebrows, but never cut their nails. The hinder part of the head is compressed at birth. The occupation of the men consists chiefly in building and repairing their huts, and in fishing and trading with the neighbouring islands. Their favourite weapon is a kind of javelin. The women cook and cultivate the ground, and are remarkable for their extreme ugliness. Most of the country-ships from the different coasts of India touch at the N. islands in order to procure cocoa nuts, which they purchase at the rate of 4 for a leaf of tobacco, and 100 for a yard of blue cloth. The yams grown on these islands are probably the finest in India; and the oranges are good and abundant. Tobacco is the current medium of all exchange and barter.—The Danes formed an establishment on these islands in 1756, but their little colony was soon swept away by fever, and they have since abandoned it owing to the unhealthiness of the climate.

NICOLA (SAN), a volcanic island of the Adriatic, in the group of the Tremiti islands, to the NE of the island of San Domino, and to the S of Caprara. It is $1\frac{1}{2}$ m. in length.—Also a town of Naples, in the prov. of Principato-Citra, district and 11 m. S of Il Vallo, cant. and 4 m. ESE of Pisciotta. Pop. 380.

NICOLA-DELL'ALTO (SAN), a town of Naples, in the prov. of Calabria-Ultra, district and 17 m. NNW of Cotrone, cant. and 5 m. WNW of Stron-goli. Pop. 1,800. It has 4 churches.

NICOLA-LA-BARONIA (SAN), a town of Naples, in the prov. of Principato-Ultra, district and 9 m. SSE of Ariano, cant. and $1\frac{1}{2}$ m. NNE of Castellodella-Baronia. Pop. 1,300.

NICOLA-DELLA-STRADA (SAN), a village of Naples, in the prov. of Terra-del-Lavoro, district and $1\frac{1}{2}$ m. SSE of Caserta, and 19 m. NNE of Naples. Pop. 2,500.

NICOLA-DE-STRAFACE (SAN), a town of Naples, in the prov. of Calabria-Citra, district and 23 m. ENE of Castrovillari, cant. and 8 m. WNW of Amendolara. Pop. 1,463.

NICOLAEFF, a town of Russia, in the gov. of Kherson, in a fertile plain near the point of junction of the Ingul and the Bng, in N lat. $46^{\circ} 58'$, E long. $30^{\circ} 46'$, 40 m. from Kherson, 77 m. from Odessa, and 1,362 m. from Petersburg. It was founded in 1791, and the admiralty of the Black sea was removed to it from Kherson; but the tide of prosperity has ebbed from it, in its turn, since Sebastopol became the chief

station of the Black sea fleet; and its pop., once estimated at 30,000, is now reduced to 8,000. Its streets are wide and regular, and planted with trees on both sides. The dockyards are at the foot of the height above the bridge. Along the top of the bank below the bridge runs a public walk, planted with trees and flowering shrubs; behind this walk stand the more important of the public buildings, such as the college-of-cadets, the handsomest of the whole, the admiral's residence, the observatory, and the admiralty. Behind these, again, run the wide sandy streets of the town. The timber employed here in ship-building comes chiefly by the Dnieper to Kherson. All the large vessels constructed here are floated empty down the river to Glubokoyé, where they take in their cannons and tackle; and from this point they must be transported on flats called camels to the Black sea. Several Englishmen are employed in the dockyards. The environs abound in good pasture-land, and are well cultivated.

NICOLAI I. ISLAND, one of the largest islands in the sea of Aral, in N lat. 44° 59' 4", E long. 59° 16' 54". It is the ZAREN of early maps.

NICOLAI (SAINT), a village of Switzerland, in the cant. of Wallis, to the SW of Visp. Pop. 480.

NICOLAO (SAN), a canton, commune, and town of Corsica, in the arrond. of Bastia. The cant. comprises 5 coms. Pop. in 1831, 2,308; in 1841, 2,477. The town is 27 m. from Bastia. Pop. 618.

NICOLAO (SAO), an island of the Atlantic, in the group of the Cape-de-Verde islands, to the SE of the island of Santa Lucia, and NNW of that of St. Jago. Its W point is 8 m. E of Raza. It is 30 m. in length from E to W, and about 12 m. in breadth. On its S side are an extensive promontory, and the bays of St. George and Terrafal. Pop. 6,000. It has a generally mountainous surface, and contains some fertile valleys, in which coffee is successfully cultivated. Its chief town, which bears the same name, contains about 1,400 inhabitants.

NICOLAO (SAO), a village of Brazil, in the prov. of São-Pedro-do-Rio-Grande, about 5 m. N of Rio-Pardo.—Also a v. of the same prov., in the comarca of the Missões, on the r. bank of the Piratini, near its confluence with the Uruguay. Pop. 3,940.—Also a river of the prov. of Piahi, an affluent of the São-Victor.

NICOLAS, an island of the Bahama old channel, off the N coast of Cuba, to the NE of the river Morina.—Also a channel which separates the bank of Los Roques from the chain of islets which extends along the N coast of Cuba. It is about 75 m. in length, and 39 m. in breadth. Its central part is in N lat. 23° 20', and W long. 80°.

NICOLAS (SAINT), a town of France, in the dep. of the Cotes-du-Nord, cant. and 1½ m. S of Bèthoa, and 18 m. S of Guingamp.—Also a village in the dep. of the Manche, cant. and 2 m. ESE of Granville, and 15 m. NW of Avranches. Pop. 2,300.—Also a department, commune, and town of Belgium, in the prov. of East Flanders, and arrond. of Termonde. Pop. of dep. 18,477. The town is 10 m. NNE of Termonde, and 21 m. ENE of Ghent. Pop. 10,959. It is well-built, and has a large square surrounded by handsome houses, a fine town-house, a parish-church, a college with a chapel attached, several schools, an hospital, and several other charitable institutions, and a prison. It possesses numerous silk, woollen, and cotton factories, several spinning and printing mills, dye-works, manufactories of musical instruments, of carpets, hats, hosiery, tape, lace, leather, cards, earthenware, pipes, spangles, soap, starch, and tobacco, several salt-refineries, distilleries and breweries, vinegar-manufactories, and oil-mills, and extensive tile and brick works, and carries

on an active trade in grain, cattle, horses, hemp, and thread. The town returns one deputy, and the rural district three, to the provincial states.—Also a department and com. in the prov. and arrond. of Liege. Pop. of dep. 1,447; of com. 260. It has extensive coal-mines.—Also a commune in the prov. of West Flanders, and dep. of Pervyse. Pop. 588.

NICOLAS (SAINT), a harbour on the NW coast of the island of Zea, in the archipelago. It is 1½ m. in length, and about ¾ of a mile in breadth, and is enclosed on the NW by a steep and narrow peninsula, on which is the hermitage of St. Nicolas.—Also a fort on the E coast of the island of Rhodes, 29 m. SSW of the capital. Opposite it is a group of islands of the same name.

NICOLAS (SAINT), a harbour of Lower Canada, in the district and 270 m. NE of Quebec, on the N coast of the estuary of the St. Lawrence, and 24 m. W of Cape Mont-Péles. At the entrance on the E is a cape of the same name.

NICOLAS (SAINT), a deltoid arm of the Quorra, to the W of the Santa Barbara branch.

NICOLAS (SAINT), a headland at the NW extremity of the island of Java, to the NW of the bay of Bantam, in S lat. 5° 52', and E long. 106° 2' 2". It is the most northerly point in the island.

NICOLAS (SAINT), a headland of Hayti, on the NW coast of the island, 6 m. NE of Cape Foux, and at the extremity of a small peninsula, which encloses on the N the bay of the Mole-Saint-Nicolas, in N lat. 19° 50', and W long. 73° 33'.

NICOLAS (SAN), a small island of the Pacific, near the coast of New California. Its SE point is in N lat. 33° 14' 12", and W long. 119° 25' 00".

NICOLAS DE LOS ARROYOS (SAN), a town of the republic of Monte-Video, 60 m. SE of Candalaria, and 50 m. N of Monte-Video. It stands on high ground, and consists of a few long streets crossing each other at right angles. It suffered greatly from the explosion of a powder-magazine which stood in one of the angles of the principal squares, in December, 1852. Pop. about 5,000. The scenery in the neighbourhood is flat and uninviting.

NICOLAS-D'ALIERMONT (SAINT), a commune of France, in the dep. of the Seine-Inferieure, cant. and 1½ m. SW of Envermen, and 8 m. SE of Dieppe. Pop. in 1841, 1,956. It has long been noted for its manufacture of clocks.

NICOLAS-DES-BIEFS (SAINT), a commune of France, in the dep. of the Allier, cant. and 6 m. E of Mayet-de-Montagne, and 21 m. S of La Palisse. Pop. 1,222.

NICOLAS-DE-BOURGUEIL (SAINT), a commune of France, in the dep. of the Indre-et-Loire, cant. and about ¼ mile N of Bourgueil, and 12 m. N of Chinon. Pop. 2,104.

NICOLAS-DE-LA-GRAVE (SAINT), a canton and commune of France, in the dep. of the Tarn-et-Garonne, and arrond. of Castel-Sarrasin. The canton comprises 14 com. Pop. in 1831, 10,691; in 1841, 10,794. The village is 6 m. NW of Castel-Sarrasin, and 10 m. W of Montauban, near the l. bank of the Garonne. Pop. in 1841, 3,033. The environs are noted for their melons.

NICOLAS-PRES-GRANVILLE (SAINT), a commune of France, in the dep. of the Manche, and cant. of Granville, 20 m. NW of Avranches. Pop. in 1841, 3,279.

NICOLAS-DE-PONT-SAINT-PIERRE (SAINT), a commune of France, in the dep. of the Eure, and cant. of Ecouis, 15 m. from Les Andelys. Pop. 754. It has several spinning and fulling mills, and a manufactory of cloth.

NICOLAS-DU-PORT (SAINT), a canton, commune, and town of France, in the dep. of the

Meurthe, and arrond. of Nancy. The cant. comprises 25 com. Pop. in 1831, 15,786; in 1841, 16,176. The town is 9 m. SE of Nancy, and 10 m. WNW of Luneville, on the l. bank of the Meurthe, which is here crossed by two stone-bridges. Pop. in 1841, 3,178. It has a handsome Gothic church, a town-hall, a lunatic asylum, an hospital, and a public abattoir, and possesses manufactories of varieties of cotton and linen fabrics, hosiery, brocade, several spinning and fulling-mills, dye-works, tanneries, rope-works, foundries, gypsum-works, an oil-mill, and distilleries of brandy.

NICOLAS-DEL-PUERTO (SAN), a town of Spain, in Andalusia, in the prov. and 39 m. NE of Sevilla, and partido of Cazalla-de-la-Sierra. Pop. 7,240. It has a parish-church, several convents and hospitals, and a public granary.

NICOLAS-DEL-REAL-CAMINO (SAN), a town of Spain, in the prov. of Palencia, partido and 18 m. WNW of Carrion-de-los-Condes. Pop. 94. It has an hospital.

NICOLAS-DE-REDON (SAINT), a canton and commune of France, in the dep. of the Loire-Inferieure, and arrond. of Savenay. The cant. comprises 4 com. Pop. in 1831, 9,915; in 1841, 9,950. The village is 24 m. N of Savenay, on the l. bank of the Vilaine. Pop. 1,621.

NICOLAS-DE-SARARE (SAINT), a town of New Granada, in the dep. of Boyaca, prov. and 30 m. SW of Pamplona, near the source of the Sarare. Pop. 1,200.

NICOLAS-DE-LA-TAILLE (SAINT), a town of France, in the dep. of the Seine-Inferieure, cant. and 4 m. W of Lillebonne, and 21 m. E of Havre, near the r. bank of the Seine. Pop. 950.

NICOLET, a county of Lower Canada, in the district of Three Rivers, extending N to the St. Lawrence, on which it has a breadth of 32½ m., and comprising an area of 475 sq. m. It has a generally level surface, and is watered by several rivers, of which the Nicolet, Becancour, and Gentilly are the chief. It contains 5 parishes, and sends two members to the provincial parliament. Pop. 12,593.—Also a river which has its source in a lake of the same name, in the same district, in the SE corner of the township of Ham; runs in a generally NW direction; and after a course of about 75 m., throws itself, by two branches, into Lake Saint Pierre. It consists of two principal branches, distinguished as the eastern and western; the former of which rises in Wolfstown, and the latter in Weedon. Numerous settlements have been formed on the lower part of this river.—Also a seignory in the co. of Nicolet, bounded in front by Lake St. Peter. The soil in the interior is good, and on the banks of the river is extremely fertile. About ¼ths of the seignory are under cultivation. The village is pleasantly situated on the Nicolet, about a mile from its mouth. It contains about 90 houses, with a Roman Catholic church in the centre, and an episcopal chapel.

NICOLO (SAN), an island of the Adriatic, on the coast of Dalmatia, and circle of Cattaro, at the entrance of the port of Budua, in N lat. 42° 15' 50", and E long. 18° 50' 30".—Also a town of Dalmatia, in the island of Mortero, circle and 36 m. SE of Zara. Pop. 427.—Also a town on a rock on the SE coast of the island of Tinos, Grecian archipelago, 90 m. ESE of Athens. Pop. 4,000. It possesses some fortifications, and has a suburb and a cathedral.—Also a village and port of the island of Cerigo, Ionian sea, on the E coast, 9 m. NNE of Capsali, on the N side of a bay of the same name. Pop. 400. A fort in the vicinity, bearing the same name, is in N lat. 36° 15' 7", and E long. 23° 4' 34". Numerous ruins, including those of the ancient *Cythera*, are

found in the neighbourhood.—Also a rocky islet off the E coast of Anatolia, in N lat. 36° 33', E long. 29° 8', at the bottom of a gulf formed by Cape Angistro on the W. It is 1 m. in length, and 2 furl. broad, and attains an alt. of 700 ft. Its whole surface is covered, from sea to summit, with the remains of houses, arches, churches, monasteries, and reservoirs. The distance between the rock and the mainland on the N is only a few yards.

NICOLO-DI-LIDO (SAN), a fortress of Austria, in Lombardy, in the prov. and district and 3 m. E of Venice, at the extremity of a long and narrow island. In its vicinity is the port of the same name.

NICOLOSI, a town of Sicily, in the prov. and district and 9 m. N of Catania, on the S side of Mount Etna. Pop. 3,600. This town, which is the most elevated of the towns built on this volcano, was to a great extent destroyed by a torrent of lava in 1538. It has some silk-mills.

NICOMEDIA. See ISMID.

NICOPOLI, NIKOPOL, or TOHINGANT-KALE, a town of Turkey in Europe, in Bulgaria, cap. of the sanjak and 56 m. W of Rastchuk, 90 m. SW of Bucharest, and 300 m. NW of Constantinople, on the r. bank of the Danube, a little below the confluence of the Aluta and Osma. Pop. loosely estimated at 10,000. It occupies a height, defended by ramparts and by an ancient fortress, and surrounded by several suburbs. It contains some handsome houses, several mosques, baths, &c.; but is generally ill-built. Its situation on the Danube renders it a place of considerable commercial importance. The suburbs are inhabited chiefly by Greeks and Bulgarians. N. was founded by Trajan, and some remains of the ancient walls are still to be seen. It is noted for the signal defeat of Sigismund, king of Hungary, by the Turks, in 1396.

NICOSIA, a district and town of Sicily, in the prov. and 45 m. WNW of Catania, and 75 m. ESE of Palermo. Pop. 13,000. It stands on the declivity of two hills, the bases of which are watered by the Salato and Capizzi; and contains numerous churches and convents, and a cathedral in the Norman style. Its trade consists chiefly in wine, corn, oil, and cattle. In the environs are beds of argillaceous schist and of iron pyrites, a productive salt-mine, springs of petroleum, and several sulphureous springs. This town occupies the site of the ancient *Herbita*, noted for its resistance to Dionysius, tyrant of Syracuse. The district comprises 5 cant.

NICOSIA, LEUCOSIA, or LEFKOSIA, a town of Turkey in Asia, capital of the island of Cyprus, and of the sanjak of the same name, 9 m. from the N coast of the island, 210 m. WSW of Aleppo, and 540 m. SE of Constantinople, in N lat. 35° 13' 14", E long. 33° 26' 30". It stands on a slight elevation, in the centre of an extensive plain, surrounded by mountains, of which the highest summits are covered with snow. Pop. 18,000, about two-thirds of whom are Turks. It is ½ m. in circuit; and is enclosed by lofty stone-walls, flanked with 13 bastions of great strength. The moat, which was formerly nearly ½ a m. in width, is now dry and in part filled up, and converted into corn-fields. Notwithstanding the strength of its fortifications, it is incapable of sustaining a siege, in consequence of being commanded by the adjacent heights. It is entered by three gates, distinguished by the names of Paphos, Cerina, and Famagusta or Larnica. The Greek quarter of the town contains some handsome streets; but the others are narrow, irregular, unpaved, and dirty; and the city generally is in a neglected and ruinous state. The houses generally are ill-built, and many are mere huts; but a few large and commodious dwellings are to be seen, surrounded by gardens planted

with orange, citron, and palm-trees. The ancient palace of the kings of Cyprus, an extensive structure, is now used as the governor's residence. The archiepiscopal palace is also a spacious edifice. The town contains 8 mosques, of which one is the ancient cathedral of Saint Sophia, a superb Gothic edifice; 6 Greek churches, numerous convents, 4 public baths, a large caravanserai, and a well-stocked bazaar.—It has manufactories of Turkey leather, carpets, and printed cottons. Wine and cotton form its chief articles of export. The surrounding plain possesses little fertility, and adjacent to the town is marshy and insalubrious. The wines, for which the island is noted, are grown on the slopes of the surrounding hills.—N. occupies the site of the ancient *Tremitus*. Previous to its possession by the Venetians, it was of great extent, containing 300 churches and numerous palaces and monasteries. From the Venetians it was taken by Selim II., and has since continued under the dominion of the Turks. The sanjak comprises the E. part of the island, and contains extensive salt-works.

NICOTERA, a town of Naples, in the prov. of Calabria-Ultra, district and 13 m. SW of Monteleone, and 45 m. SW of Catanzaro, near the gulf of Gioja. Pop. 3,800. It consists of an upper and lower town. The former contains a fine square, some handsome houses, the episcopal palace, and a college. The lower part consists of an assemblage of mean and miserable dwellings, inhabited chiefly by mariners and fishermen. This town suffered severely from an earthquake in 1783.

NICOYA, a town of Central America, in the state of Costa-Rica, near the N. coast of a gulf of the same name, and 76 m. WNW of Cartago.—Also a town of the same state, 96 m. W of Cartago, on the NE. part of a peninsula of the same name, 15 m. from the shore of the gulf of Nicoya, and 24 m. from the SW bank of Lake Nicaragua. Pop. 3,000. Ship-building and the manufacture of some common fabrics form the chief branches of local employment. The trade consists chiefly in corn, maize, honey, poultry, salt, and purple-fish.—The peninsula lies partly in the NW of the state of Costa-Rica, and partly in the S. of that of Nicaragua, and to the S. of the lake of that name, between the gulf of Papagayo on the NW and that of Nicoya on the SE. It is about 120 m. in length from N. to S., and 90 m. in medium breadth from E. to W., and terminates in the S. in Cape Blanco. In the N. part is the volcano of Papagayo; but in its greater extent it is flat, and well adapted to the cultivation of sugar. The climate is extremely warm and unhealthy.

NICOYA (GULF OF), or **LAS SALINAS**, an indentation of the W. coast of Central America, in the state of Costa-Rica, to the E. of the peninsula of Nicoya, and S. of Lake Nicaragua, from which it is separated by a distance of about 69 m. The depth of its embrasure from N. to S. is about 60 m., and its greatest breadth 54 m. Its principal port is that of Punta-Arenas, from which a road has been executed to the capital, which admits of produce being conveyed to the port in the ordinary wheel-carriages of the country in 5 days. Vessels of large size cannot however approach nearer than 2 m. It contains a number of small islands; and receives several rivers, the principal of which are the Cartago, Palmas, Chome, and Mandetre. It affords large quantities of purple fish. It has been proposed to connect this gulf with the river San-Juan, by means of a canal and the river San-Carlos.

NICUMAN, a river of Mandshuria, in the district of Sagalin-Ula, an affluent of the Amour, which it joins, on the l. bank, after a course in a SW direction of about 240 m.

NIDA, a river of Poland, in the woiwodie of Cracow. It has its source in the obwod of Kielce, near Moskarzów; runs first E., then SSE; passes Sobkow, Pinczow, and Wislica; and after a navigable course of about 75 m. joins the Vistula, on the l. bank, at Nowemiaszto-korczyn.

NIDAU, an amt or bailiwick and village of Switzerland, in the cant. of Berne. The bail. contains 10 parishes, and 10,096 inhabitants. The v. is 18 m. NW of Berne, at the NE. extremity of Bienne, at the efflux of the Thiele. Pop. 614. It has several bleacheries, and carries on an extensive trade in salt.

NIDD, a river of Yorkshire, which rises 3 m. NE. of Kettlewell, on Black-Fell, and flows E., SE., and then NE., to the Ouse at Nun-Monkton.

NIDD-WITH-KILLINGHALL, a parish in the W. R. of Yorkshire, 4 m. NW by W. of Knaresborough, and N. of the Nidd. Area 1,016 acres. Pop. in 1831, 110; in 1851, 114.

NIDDA, a river which has its source in the Vogelsberge, in the E. part of the prov. of Upper Hesse, traverses the W. part of the prov. of Hanau, in Electoral Hesse, and of the territory of Frankfurt-on-the-Main; enters the duchy of Nassau; and throws itself into the Main, on the r. bank, a little to the E. of Höchst, 7 m. W. of Frankfurt, and after a course in a generally SW. direction of 60 m. The Horlof, Wetter, and Nidder, the latter of which it receives on the l., are its principal affluents. Scholten, Nidda, Staden, and Rödelshausen, are the principal towns on its banks. Alt. above sea-level at its source 799 yds.; at Nidda, 305 ft.—Also a bailiwick and town of the grand-duchy of Hesse-Darmstadt, in the prov. of Upper Hesse, the town is 20 m. SE. of Giessen, and 27 m. NE. of Frankfurt, on a river of the same name. Pop. 1,871. It has manufactories of linen and hosiery, and several tanneries. In its vicinity are the mineral baths of Salzhausen.

NIDDEN, a village of Prussia, in the regency of Königsberg, on the long, narrow tract which separates the Curische-Haff from the Baltic, and to the S. of Memel.

NIDDER, a river which has its source in the grand-duchy of Hesse-Darmstadt, and prov. of Upper Hesse, in the Vogelsberge, about 5 m. S. of the source of the Nidda, flows thence into Electoral-Hesse, traverses the W. part of the prov. of Hanau, and joins the Nidda, on the l. bank, to the NE. of Vilbel, and after a course in a generally SW. direction of 45 m.

NID-ELV, a river of Norway, in the prov. of Christiansand, which issues from Lake Nisservand, in the bail. of Bradsberg, traverses the E. part of the bail. of Nedenaes, and after a course in a generally S. direction of 75 m., throws itself into the Skagerrack at Arendal, opposite the island of Tromøe.—Also a river in the prov. of South Trondheim, which has its source in a large lake, and a little below Trondheim throws itself into the Trondheim fiord.

NIDERVILLER, a village of France, in the dep. of the Meurthe, cant. and 5 m. S. of Sarrebourg. Pop. 760. It has a manufactory of porcelain and pipes, and a glass-work.

NIDGULI, a town and fortress of Hindostan, in the district of Mysore, 45 m. E. of Chittledrug, on a mountain.

NIDINGEN, a small island near the W. coast of Sweden, in the Cattegat, in N. lat. 57° 18' 21", and E. long. 11° 54' 45". It has a lighthouse.

NIDOKI, a town of Russia in Europe, in the gov. and district and 54 m. NNW. of Vilna, and 5 m. ENE. of Wilkomirz.

NIDWALD, or **NIDWALDEN**, a district of Switzerland, in the N. part of the cant. of Unterwalden. It comprises 13 com., and contains 9,610 inhabitants (Catholic). Its chief town is Stanz.

NIEBEL, a town of Senegambia, in the state of Tuta-Dualon, in the midst of lofty mountains, 90 m. NW of Labbe.

NIEBLA, a town of Spain, in Andalusia, in the prov. and 18 m. NE of Huelva, and partido of Moguer, on the r. bank of the Tinto. Pop. 983. It is the chief town of a county of the same name, and has the remains of ramparts, 5 churches, a convent, and an hospital. In the environs are some copper mines. This town is the *Ilipala* of the Romans.

NIEBOROWITZ, a village of Prussia, in the prov. of Silesia, regency and 48 m. SE of Oppeln circle and 18 m. S of Tost. Pop. 410. It has a large iron-work.

NIED, a river of France, in the dep. of the Moselle, formed by the junction of the Nied Française, which has its source at Marthil in the dep. of the Meurthe, and of the Nied-Allemande which takes its rise at Magstadt in the dep. of the Moselle, and which unite in the cant. of Boulay at Condé-Northen. The united stream flows NNE and throws itself into the Sarre, on the l. bank, 8 m. NW of Sarrelouis. The total length of its course from the source of the Nied-Française is 48 m. It is liable to inundations.

NIEDECK, a hamlet of Hanover, in the gov. of Hildesheim, principality and 6 m. ESE of Gottingen. Pop. 60.

NIEDEGGEN, a town of Prussia, in the prov. of the Rhine, regency and 19 m. E of Aix-le-Chapelle, circle and 6 m. S of Düren, at the foot of a rock, on the Roër. Pop. 570. It has a castle, now in a dilapidated condition, built in the 12th century by the Counts of Julius.

NIEDELBAD, a village of Switzerland, in the cant. and S of Zurich, and on the lake of that name.

NIEDENSTEIN, a town of Hesse-Cassel, in the prov. of Lower Hesse, circle and 9 m. from Fritzlar. Pop. in 1840, 689, of whom 120 were Jews.

NIEDER, a German word signifying 'lower.' For names with which it is compounded not found below, see the other term of the compound.

NIEDERBETSCHDORF, a commune of France, in the dep. of the Lower Rhine, and cant. of Soultz-sous-Forêt, 12 m. S of Wissembourg. Pop. 1,278.

NIEDERBRONN, a canton, commune, and town of France, in the dep. of the Lower Rhine, and arrond. of Wissembourg. The cant. comprises 20 com. Pop. in 1831, 19,600; in 1841, 20,187. The town is 12 m. SW of Wissembourg, and 27 m. NNW of Strasburg, on the Falken. Pop. in 1841, 2,922. It has an extensive bathing-establishment.

NIEDERHAUSEN, a village of the duchy of Nassau, bail, and 5 m. S of Idstein. Pop. 325. It has several corn-mills and a powder-mill.

NIEDERMERSCHWILLER, a commune of France, in the dep. of the Upper Rhine, and cant. of Mulhausen, 9 m. N of Altkirch. Pop. 1,334.

NIEDERNAU, or **NIDERAU**, a village of Würtemberg, in the circle of the Schwartzburg, bail, and 1½ m. W of Rotenburg, on the r. bank of the Neckar. Pop. 412. It has several mineral baths.

NIEDERNHALL, a town of Würtemberg, in the circle of the Jaxt, bail, and 4 m. W of Künzelsan, on the Kocher. Pop. in 1840, 1,487. It has several saline springs.

NIEDERSTETTEN, a town of Würtemberg, in the circle of the Jaxt, bail, and 11 m. N of Gerabronn, and 11 m. SE of Mergentheim, on the Vorbach. Pop. 1,562. It has a castle, and carries on a considerable trade in wine.

NIEFERN, a town of the grand-duchy of Baden, in the circle of the Middle Rhine, bail, and 5 m. ENE of Pforzheim, and 21 m. ESE of Karlsruhe, on the r. bank of the Enz. Pop. 1,279.

NIEGOWICE, a town of Galicia, in the circle and 9 m. E of Bochnia, and 17 m. E of Cracow.

NIEHRIM, a town of Prussia, in the prov. of Westphalia, regency and 38 m. SSE of Minden, circle and 8 m. NNW of Brakel. Pop. 1,272.

NIEHL, a village of Prussia, in the prov. of the Rhine, in the regency and 6 m. WNW of Cleves. Pop. 1,220.

NIEL, a department and commune of Belgium, in the prov. and arrond. of Antwerp. Pop. of dep. 2,967. The village is 9 m. S of Antwerp, on the r. bank of the Rupel. Pop. 1,850.—Also a department and commune in the prov. of Limburg, and arrond. of Hasselt. Pop. of dep. 293.—Also a department and commune in the same prov. and arrond. of Tongres, watered by the Beek-de-Asch. Pop. 163.

NIELLA, a village of Sardinia, in the dio. of Coni, prov. and 7 m. NE of Mondovi, on the l. bank of the Tanaro. Pop. 1,612.

NIEMECK, a town of Prussia, in the prov. of Brandenburg, regency and 28 m. SSW of Potsdam, circle and 6 m. SSE of Zauch-Belzig. Pop. 2,340. It has several spinning-mills and distilleries.

NIEMEN, or **NIEMAN**, a river, the **MEMEL** of the Germans, and **NIEMONA** of the Lithuanians, which has its source in Russia, in the gov. of Minsk, in the E part of the district of Igoumen, near Pesotchna, on the confluence of several streams of which the Ousa is the principal, on the watershed between the Baltic and the Black sea. It takes first a W direction, runs along the confines of the gov. of Vilna and Grodno, and traverses the N part of the latter gov. At the town of Grodno it turns N and runs along the frontier of the Polish woiwodie of Augustowo, but resumes, soon after passing Kowno, where it is joined by the Wilia, a W direction. It then enters Prussia; traverses under the name of Memel the N part of the prov. of East Prussia; passes Ragnit and Tilsit, and 8 m. below Tilsit, divides into two branches which discharge themselves into the Curische-Haff. The smaller of the two deltoid branches runs SW, and has at its mouth the town of Gilge to which it gives its name. The other runs N under the name of Russ, and subdivides near the town of that name into three branches, viz. the Almat, Skirviet and Pokolna, which form at their mouth numerous islands. The N. has a course of 450 m. Its principal affluents are on the r. the Berezhina, Meretchanka, Wilia, Peveja, Doubitzka and Joura; and on the l. the Chitchara, Zelva and Szeschuppe. This river is broad, deep and navigable, even in summer; and is connected by means of the canal of Oginski with the Jaselda or Yasiolda, an affluent of the Pripec. This river engrosses nearly the whole trade of Lithuania and Volhynia.—In 1066 the sons of the grand-duke Yaroslav gained a signal victory on its banks over Prince Vseslav-Briatchislavitch of Potosk, and it is also noted for an interview which Napoleon Buonaparte and Alexander had on its waters near Tilsit.

NIEMENTCHIN, a town of Russia in Europe, in the gov. and district and 18 m. NNE of Vilna, on the r. bank of the Wilia. Pop. 1,800.

NIEMES, or **MIMONIX**, a municipal town of Austria, in Bohemia, in the circle of Bunzlau, 20 m. NNW of Jung-Bunzlau, and 33 m. NE of Leitmeritz, on the Jeschenbach, at its confluence with the Jungferbach. Pop. 3,336. It has manufactories of cotton and woollen fabrics. Sapphires are found in the surrounding district.

NIEMETZKI-GRAD. See **GRATZ**.

NIEMIROV, a town of Russia in Europe, in the prov. of Bialystock, district and 28 m. SE of Drohitchin, on the r. bank of the Bog.

NIEMIROW, a town of Galicia, in the circle and

28 m. W of Zolkiew, and 33 m. NW of Lemberg. Pop. 1,900.

NIEMODIN. See **FALKENBERG.**

NIEMOKSTZY, a town of Russia in Europe, in the gov. of Vilna, district and 17 m. WNW of Rosiena, and 45 m. SSW of Chavli. Pop. 1,700.

NIEMTSCHITZ (GROSS), a town of Austria, in Moravia, in the circle and 13 m. SSE of Brunn, and 11 m. SW of Austerlitz, on an island of the Schwaza. Pop. 1,050.

NIENBORG, a market-town of Prussia, in the prov. of Westphalia, reg. and 27 m. NW of Munster, circle and 5 m. NNE of Ahaus, on the Dinkel. Pop. 1,000. It has an ancient fortress.

NIENBURG, a bailiwick and town of Hanover, in the co. of Hoya. Pop. of bail., exclusive of the town, 6,500. The town is 32 m. NW of Hanover, and 36 m. SE of Bremen, on the r. bank of the Weser, at the confluence of the Murbach. Pop. 4,300. It contains 2 churches and an hospital; and has manufactories of linen fabrics, and of vinegar and oil. The trade consists chiefly in timber and coal. Tobacco and chicory are cultivated in the environs. N. was formerly a place of considerable strength. Its fortifications were demolished by the French in 1807.

NIENBURG, KLOSTER-NIENBURG, or MUN-CHEN-NIENBURG, a bailiwick and town of the duchy of Anhalt-Köthen. The town is 12 m. NW of Köthen, on the l. bank of the Saale, at the confluence of the Bode, which is here crossed by a bridge. Pop. 1,900. It is enclosed by walls, and has 2 suburbs, a castle, and 2 churches. Coal is wrought in the environs.

NIEPER. See **DNIEPER.**

NIÉPOLOMICE, a town of Austria, in Galicia, in the circle and 11 m. NW of Bochnia, near the r. bank of the Vistula.

NIÉPPES, a commune and town of France, in the dep. of the Nord, cant. and 5 m. ESE of Bailleul. Pop. in 1841, 3,451. It has several breweries and vinegar manufactories, numerous lime and tile-works, manufactories of potash, and several spinning-mills and bleacheries.

NIERHOXENT, a commune of Belgium, in the prov. of Limburg, and dep. of Exel. Pop. 203.

NIERS, or NEERS, a river which has its source in Prussia, in the prov. of the Rhine, in the circle and 6 m. E of Erkelenz; flows thence into Belgium; traverses the prov. of Limburg; and throws itself into the Meuse, on the r. bank, $1\frac{1}{2}$ m. NW of Gennepe, and after a tortuous course, in a generally NW direction, of about 72 m. Wachtendonk, Gueldres, Goch, and Gennepe, are the principal towns which it waters. In October and April it is liable to inundations. It is navigable, although not without difficulty, on account of the number of sand-banks with which its bed is obstructed. Its waters abound with fish.

NIERSTEIN, a village of the grand-duchy of Hesse-Darmstadt, in the prov. of Lower Hesse, cant. and $1\frac{1}{2}$ m. NW of Oppenheim, and 10 m. SSE of Mayence, on the l. bank of the Rhine. Pop. 2,201, of whom 947 are Catholics. In the vicinity are the baths of Sirona-Bad, on the site of the ancient Roman baths of *Sirona*. The environs are noted for their excellent wine.

NIESKY, a town of Prussia, in the prov. of Silesia, reg. of Liegnitz, and circle of Rothenburg. Pop. 600. It has a Moravian gymnasium with a fine museum of natural curiosities; and possesses manufactories of cotton and linen fabrics, and leather.

NIESTE, a village of Hesse-Cassel, in the prov. of Lower Hesse, and circle of Cassel, on a river of the same name. Pop. 571. It has a custom-house. Previous to 1831 it belonged in common to Hesse and Hanover.

NIESUCHATSCHI, a town of Russia in Europe, in the gov. of Volhynia, district and 12 m. NNE of Kowel, on the r. bank of the Turia. Pop. 150.

NIESZAWA, a town of Poland, in the woiwodie of Masow, and obwod. of Kujavie, 45 m. WNW of Plock, on the l. bank of the Vistula. Pop. 824. It has several breweries and distilleries.

NIESZWITSCH, NIESWICZ, or NESVIL, a town of Russia in Europe, in the gov. and 63 m. SW of Minsk, district and 39 m. WNW of Sloutzk, on the Lipa, an affluent of the Niemen. Pop. 4,000. It is the cap. of a principality, and of a majorat belonging to the family of Radzwill, and has a Benedictine abbey. Its fortifications were destroyed by the Swedes in 1706.

NIEUBURG, a commune of Belgium, in the prov. of E. Flanders, and dep. of Assenede. Pop. 282.

NIEUCAPPELLE, a department and commune of Belgium, in the prov. of W. Flanders, and arrond. of Furnes. Pop. 734.

NIEUIL, or NIEUL, a commune of France, in the dep. of the Charente-Inferieure, cant. and 4 m. N of La Rochelle. Pop. 1,317.—Also a commune in the dep. of the Haute-Vienne, cap. of a cant., in the arrond. and 9 m. NW of Limoges, on the l. bank of the Glane. Pop. 730. It has a spinning and an oil-mill.

NIEUIL, or NIOEIL, a commune of France, in the dep. of the Charente, cant. and 2 m. SE of St. Claud, and 14 m. SW of Confolens, on the Son. Pop. 1,412. It has a manufactory of pottery, and in its vicinity is a mine of iron.

NIEUIL-DENANT, a commune of France, in the dep. of the Vendée, and cant. of Saint-Hilaire-des-Loges, 8 m. SE of Fontenay-le-Comte. Pop. 1,111. It has manufactories of candles and of oil.

NIEUIL-LESPOIR, a village of France, in the dep. of the Vienne, cant. and 5 m. ENE of Villedieu, and 9 m. SE of Poitiers. Pop. 500.

NIEUIL-LE-VIROUL, a village of France, in the dep. of the Charente-Inferieure, cant. and 3 m. NE of Mirambeau, and 6 m. WSW of Jonzac, on the Tarnac. Pop. 1,250.

NIEUKERKEN-WAES, a department and commune of Belgium, in the prov. of E. Flanders, and arrond. of Termonde. Pop. of dep. 2,389; of com. 587.

NIEUPOORT, a commune of Belgium, in the prov. of E. Flanders, and dep. of Lokeren. Pop. 1,227.

NIEUPORT, a department, commune, and town of Belgium, in the prov. of W. Flanders, arrond. of Furnes. Pop. of dep. 2,936. The town is 7 m. NW of Furnes, and 23 m. WSW of Bruges, on the Yser, $1\frac{1}{2}$ m. from the sea. It communicates by means of canals with Furnes and Bruges, and with Dixmude and Ypres by the Yperlee. It is ill-built and unhealthily situated, and has manufactories of fishing-nets and cordage. Fishing forms one of the chief employments of the inhabitants. This town was formerly a mere hamlet, dependent on the town of Lombarsyde, which was destroyed by a tempest in June 1116. It was enclosed by walls by Philip of Alsace; and after being reduced to ruins by the English in 1383, was rebuilt two years after, and fortified by Philip the Bold. It sustained several sieges, the most memorable of which was that against the French in 1488. In 1600 a battle was fought in its vicinity, in which the archduke Albert was defeated by Maurice of Nassau. It was taken by the French in 1745, 1792, and 1794. The canal of Nieuport extends from the town of that name, where it unites with the Yser and the canal of Furnes, of the latter of which it is a continuation, to the canal of Ostend at Bruges, a distance of 15 m. This canal forms an

important trading communication between France and Belgium.

NIEUW, a Dutch word signifying 'new.' For names with which it is compounded, not found amongst the following, see the other name.

NIEUWE-DIEP, a village of Holland, in the prov. of Holland, arrond. and 26 m. N of Alkmaar, on the Mars-diep, a channel by which the island of Texel is separated from the continent, and at the mouth of the great Amsterdam canal. It has a fine harbour.

NIEUWEGE, a commune of Belgium, in the prov. of W. Flanders, and dep. of Varsenare. Pop. 132.

NIEUWENBRIEL, a commune of Belgium, in the prov. of E. Flanders, and dep. of Baesrode. Pop. 261.

NIEUWENDORPE, a commune of Belgium, in the prov. of E. Flanders, and dep. of Eecloo. Pop. 142.

NIEUWENHOVE, a department and commune of Belgium, in the prov. of E. Flanders, and arrond. of Audenarde. Pop. 623.—Also a com. in the prov. of W. Flanders, and dep. of Oostcamp. Pop. 115.

NIEUWENRODE, a commune of Belgium, in the prov. of Brabant, and dep. of Meysse. Pop. 936.

NIEUWERKERKEN, a department and commune of Belgium, in the prov. of E. Flanders, and arrond. of Termonde. Pop. of dep. 2,447. The v. is 9 m. SW of Termonde. Pop. 249. Agriculture and the manufacture of linen form the chief branches of local industry.—Also a dep. and com. in the prov. of Limburg, and arrond. of Hasselt. Pop. of dep. 550; of com. 326.

NIEUWKERK, or **NYKERK**, a town of Holland, in the prov. of Gelderland, arrond. and 28 m. NW of Arnheim, near the Zuyder-zee, on which it has a small port. Pop. 5,900. Tobacco is extensively cultivated in the environs.

NIEUWKOOP, a village of Holland, in the prov. of N. Holland, arrond. and 14 m. E of Leyden, cant. and 6 m. E of Woubrugge. Pop. 1,900.

NIEUWMAER, a commune of Belgium, in the prov. of Antwerp, and dep. of Calmpout. Pop. 558.

NIEUWMUNSTER, a prov. of West Flanders, in the arrond. of Bruges. Pop. 344.

NIEUWOLD, a village of Holland, in the prov. and 17 m. ENE of Groningen. Pop. 1,100.

NIEUWPOORT, a fortified town of Holland, in the prov. of Holland, arrond. and 9 m. NNW of Gorcum, and cant. of Sleydrecht, on the l. bank of the Lek, nearly opposite Schoonhoven. Pop. 390. Salmon fishing forms the chief employment of the inhabitants.

NIEUWRODE, a department and commune of Belgium, in the prov. of Brabant, and arrond. of Louvain, watered by the Molebeck. Pop. 1,043.

NIEUWSTRAET, a commune of Belgium, in the prov. of Brabant, and dep. of Rhode-Saint-Genest. Pop. 354.

NIEUWVELD (BERGEN), a range of mountains in South Africa, in the district of Beaufort, extending from the Komsberg on the SSW, to the Sneeuberg on the NNW, a distance of about 180 m. It rises to the height of 10,800 ft., and is said to be covered half the year with snow. It gives rise on the N to the head-streams of the Zak and Riet rivers, and on the S to the Zont or Salt, and the Gamka or Great Lion rivers.

NIEVA, a town of Spain, in Old Castile, in the prov. of Segovia, and partido of Santa-Maria-de-Nieva. Pop. 579. It has a parish-church and a custom-house.

NIEVA-DE-CAMEROS, a town of Spain, in Old

Castile, in the prov. and 21 m. SSW of Logrono, and partido of Torrecella-de-Cameros. Pop. 1,020.

NIEVENHEIM, a village of Prussia, in the prov. of the Rhine, regency and 8 m. S of Dusseldorf, circle and 6 m. SE of Neuss. Pop. 1,487. It has several breweries and distilleries.

NIEVERN, a village of the duchy of Nassau, bail. and 5 m. NNE of Braubach, and 6 m. SE of Coblenz, on the l. bank of the Lahn. Pop. 570. It has a forge, several foundries, and a nail-manufactory.

NIEVRE, a river of France, in the dep. to which it gives its name. It takes its rise near Bouras, in the cant. of Prémery; runs S; and throws itself, by two arms, into the Loire, on the r. bank, and after a course of 30 m.

NIEVRE, a central department of France, between 46° 40' and 47° 35' N lat., and 2° 50' and 4° 10' E long.; bounded on the N by the dep. of the Loiret and Yonne; on the E by those of the Cote-d'Or, and Saone-et-Loire; on the S by the last-named dep., and that of the Allier; and on the W by the dep. of the Cher. It comprises an area of 681,093 hect. Pop. in 1801, 232,590; in 1821, 257,990; in 1831, 282,521; in 1841, 305,346; in 1851, 327,161. It is intersected by a range of hills, forming the line of separation between the basins of the Loire and Seine, and bearing in its E part the name of the mountains of Morvan. It is watered in the N by the Yonne and its affluents, the Beuvron and Cure; in the S by Loire, Allier, Nohain, Nievre, and Aron, and contains several large lakes, of which one, named Aron, in its central part, is the largest. Its highest summit, in the mountains of Morvan, has an alt. of 880 metres = 971 yds. above sea-level. The tract along the banks of the Loire is generally fertile, but the soil in its greater extent possesses little fertility. Of the 651,457 hect. of productive soil in 1839, 148,907 were in grain; 10,132 in potatoes and legumes; 557 in beet-root; 10,325 in vineyards; 2,365 in gardens; 3,676 in orchards and nurseries; 71,948 in meadows; 258,797 in wood; and 144,697 in heaths, brushwood, and waste lands. The E portion of the dep. is extremely rugged. Its produce in grain is rather below the average; but in the valley of the Loire a considerable quantity of good corn-land exists. The elevated plains of Morvan present excellent grazing lands; and a large number of horses, cattle, and sheep are reared in the dep. The white wines of Pouilly are esteemed. The principal mineral productions are iron and coal. A large proportion of the pop. is employed in iron-works, and a considerable number in linen-weaving. The porcelain of Nevers is celebrated.—This dep. is divided into the 4 arrondissements of Nevers, Chateaux-Chinon, Clamecy, and Cosnes, which are subdivided into 25 cantons, and 316 communes. It forms the dio. of the bishop of Nevers. In 1834 it sent 4 deputies to the legislature, who were chosen by 1,084 electors.

NIF, or **NINFI**, a town of Turkey in Asia, in Anatolia, in the sanj. of Sarukhan, 30 m. E of Smyrna.

NIFON, **NIPIHON**, or **NIPOH**, the principal of the Japan islands, extending between 33° 30' and 41° 30' N lat., and between 130° 50' and 142° 20' E long., to the NE of the islands of Kiu-siu and Sikokf, from which it is separated by narrow channels, and to the SW of the island of Yezo, from which it is parted by the straits of Matsmai or Sangar; on the NW it is bathed by the sea of Japan; and on the E and S by the Pacific. The strait of Corea runs between its W extremity and the peninsula from which the strait takes its name. It presents in its general outline a curve extending from NE to SW, and presenting its convexity to the S. Its length is 900 m.; its great-

est breadth, 240 m. Its superfluous, comprising several small adjacent islands, dependent upon it, is estimated at about 42,000 m. The coasts are steep, rocky, and indented with numerous bays. Of these the principal are Jedo, Totomina, Ovari, and Osaka. Towards the NE extremity are Capes Sangar and Nambu; on the NW Capes Noto and Gamaley; and on the S coast Capes Ava and Diun. Its principal summits are Tasagoura and Oraxi in the NE; the Mottoyama mountains, which terminate in the peak of Tilesius or Krusenstern, near Cape Gamaley. Near the bay of Totomina, toward the S coast, is the volcano of Fousiyava, the highest mountain in the island, and covered with perpetual snow. Near the centre are the beautiful and sacred mountain of Yessan, and the volcano of Asamaga-daki. Earthquakes are of common occurrence, and mineral springs are to be met with in all parts of the island. It is intersected by numerous streams, of which the chief are Ayedogava, Tenriou, Oynigava, Fousiyava, and Toniak. The principal lakes are Bievano-oumi or Oitz and Facone. The latter, which is near Jedo, is held in religious veneration by the natives. Several canals intersect the island in various directions, especially in the N. The climate is generally healthy. In summer the heat is excessive. The rains commence about June, and continue several months. Thunder-storms are frequent, and disastrous hurricanes are not uncommon. The soil is not naturally fertile, but industry has rendered it highly productive, especially in the W provinces. Its chief agricultural productions are rice, wheat, barley, buckwheat, lentils, potatoes, melons, cucumbers, citrons, oranges, peaches, almonds, figs, the *kai* which affords a valuable species of oil, sesame, pepper, brown and green tea, tobacco, cotton, hemp, mulberries, camphor, and varnish, of which the finest is that of the Rhus vernix, which grows exclusively in the prov. of Yamato. Horses of a fine breed are raised in large numbers. The pearl-oyster is found to the SW of the island, and ambergris abounds on its S coast. Gold, silver, and copper are its principal mineral productions. It contains also coal, naphtha, agates, and porcelain clay. N. comprises 5 general divisions, viz.: Ochio, Quanto, Yetseggen, Yetson, and Yamaisoit, and 53 provinces. Jedo or Yedo, the capital of the empire, and Meaco, the residence of the ecclesiastical emperor, are the chief towns of Nifon. See articles JAPAN, JEDO, and MEACO.

NIGATA, a town of Japan, in the island of Nifon, and principality of Yetougo, about 180 m. N of Jedo, on a bay of the sea of Japan.

NIGDEH, or **NIDEH**, a sanjak and town of Turkey in Asia, in the central part of Caramania. The sanj. is bounded on the N by the sanj. of Ak-serai and Kaisariyeh; on the E by the last-named sanj.; on the S by the Taurus chain; and on the W by the sanj. of Konieh. It is generally mountainous, and is watered by the two head-streams of the Kizil-Irmak. Its soil is fertile, and affords excellent fruit. Cotton forms also an extensive article of cultivation. The pop. consists of Turcomans, Turks, and Greeks. The town is 100 m. E of Konia, and 72 m. SSW of Kaisariyeh, near the source of the Kizil-Irmak. Pop. 5,000. It stands on a conical-shaped rock, commanding on the E a valley, and on the W a fine plain, extending to the distance, in a SW direction, of about 50 m. It is partly enclosed by ancient walls, and contains 3 castles, several fine mosques, a celebrated Ottoman college, founded by Alaeddin, and the remains of some fine excavations cut in the solid rock. It is the residence of a pasha. N. is the *Cadyna* of the ancients.

NIGER, or **QUORRA**, a great river of Central Africa, which has excited an extraordinary interest

in modern geographers, by the remarkable nature of the region through which it flows, and still more by the various and contradictory rumours relative to its course and termination. The name *Niger*, though familiar to ancient as well as modern geographers, is not known in Africa. The great stream to which this name is given by Europeans, is known to the Negroes under the appellation of **JOLI-BA**, the last syllable being the general term for a river, and also of **QUORRA** or **KAWARA**. By the Moors it is called **NIL-EL-ABID**, or 'Nile of the Negroes'; and some travellers report that it is by the Moors of Northern Africa generally identified with the other great river of Africa, the Egyptian Nile.

Hypotheses of Ancient geographers. Herodotus notices an expedition into the heart of Africa, undertaken by five young Nasamonæ, whose tribe dwelt on the coast of the Great Syrtis, and who after traversing successively an inhabited region, a country of wild beasts which lay to the S of it, and then a great sandy desert, reached a city inhabited by black men, and situated on the banks of a great river flowing towards the rising sun. This river he infers to be the remote head or a branch of the Nile; but from the particulars given, there appears little doubt of its being the great central river of Africa. From Bilma, or some of the oases to the W of that country, a WSW course could carry the Nasamonæ to the Joliba, at a point where it has begun to flow towards the E. Strabo, Mela, and Ptolemy represent the Nile as rising in the W extremity of Mauritania; then passing through vast unknown regions, and, according to some accounts, sinking for a great space under ground, and re-appearing in Upper Ethiopia. Ptolemy, however, whose residence at Alexandria afforded better means of information, rejects altogether the idea of any communication between the N. and the Nile. He describes in considerable detail the course of the former river under the name *Nigrit*, representing it as terminated on the W by Mount Mandrus, and as giving off a divergent stream to Lake Libye, which some modern geographers identify with Lake Chad; but his statements do not include any thing positive as to the direction in which it flows.

Arabian views. Our next great source of information respecting the geography of the interior of Africa is the Saracens or Arabians. In the course of dissensions which arose among their various dynasties in Northern Africa, large bodies of Saracens crossed the desert, and founded kingdoms on the E part of the shores of the N. The most brilliant of these was Ghana, which, enriched by the gold trade of Wangara, is said to have risen to a high degree of power and splendour. Their geographers, adopting views very different from those which had prevailed among the ancients, unanimously state that the N. flows from E to W, and discharges itself into the sea—by which they understood the Atlantic or great circumambient ocean. They represented it also as rising from the same source with the Egyptian Nile, and as identified with it, but only in the earliest part of its course. Some of them, however, asserted that it did not reach the sea. Leo Africanus, the chief authority to the modern Europeans, represents the N. as flowing from E to W, and falling into the ocean; but instead of deriving it from the Egyptian Nile, he makes it flow from the lake of Bornu, situated far in the interior of Africa. The system of Leo Africanus was followed in all the European maps of the 16th and 17th centuries, where the three great streams of the Senegal, the Gambia, and the Rio-Grande, are made the estuaries by which the great central river pours itself into the Atlantic. Even the Falcinæ was supposed to be a branch first separating itself from, and then uniting with the main trunk. Bartholomew Stibbs, however, having, about the end of the 17th cent., penetrated to the upper part of the Gambia, and brought down a report that "its original or head is nothing near so far in the country as by the geographers has been represented," and that twelve days' journey above Barraconda "fowls walked over it." These assertions did not meet with much acceptance from English geographers; but in the course of the following cent., the two great French geographers, Delisle and D'Anville, became satisfied that the existing delineation of the course of the N. was altogether erroneous, and constructed maps in which the N. was again represented as flowing eastwards. Instead of the single stream rolling across the whole breadth of Africa, and falling into the Atlantic, D'Anville distinguishes the Senegal, flowing W, and falling into the Atlantic; the N. flowing E, and terminating in the lake of Reghbel, in Wangara; and another river, still farther E, flowing in the opposite direction. A lake called Maberia, evidently the same with the Dibbia, is in D'Anville's maps split into two parts, one of which is the source of the Senegal flowing W, the other of the Niger flowing E. The whole course of the latter river through Bambarra, and all of it that was seen by Park, is thus made to flow westwards.

Park's discoveries. An opposite impression as to the course of the N. was, however, entertained in some quarters, and received confirmation from reports collected at Tripoli by Mr. Lucas, who was assured by a native merchant that he had repeatedly crossed and re-crossed the river, and that it flowed with rapidity in a W direction. A more full and decisive light was at last thrown on the subject when Park, after penetrating through much of Western and Interior Africa, in 1793, reached at length Sego, the

capital of Bambarra, where he beheld "the long sought majestic N., glittering to the morning sun, as broad as the Thames at Westminster, and flowing slowly to the eastward." He traced its course downwards to Silla, and upwards to Bammakn, where it first became navigable, an extent of about 300 m. It was there reported to rise at no great distance, near Sankari, in Manding. From Silla it flows by the great commercial city of Jenné, soon after passing which, it forms the great lake of Dibbie. From the E side of that lake it was reported to issue in numerous streams, which unite into two great branches, and at last into one, before it reaches Cabra, the port of Timbuctu. Nothing, however, could be ascertained as to its farther progress and termination. We may notice, however, a few of the speculations which were formed on the subject, with the leading facts by which they were supported. The opinion which, after the discoveries of Park, became generally established, was that of Major Rennell, coinciding in some measure with the previous one of D'Anville, according to which the Niger, after issuing from Lake Dibbie, was supposed to flow E through the countries of Houssa and Cassina, till it was lost in the lakes and marshes of Wangara. The existence of these marshes is attested by the Arabian writers, who, though they combined their accounts with an assertion relative to the W course of the Niger, might probably be trusted as to the fact that there are such lakes. The evaporation produced under an African climate from their extensive surface, might, it was supposed, be sufficient to dispose of all the waters poured into them by this mighty river. A part might also flow still farther E, and exhaust itself in Lake Fitte, the Gauga of the Arabians, situated on the S frontier of the kingdom of Borné.

Hornemann's theory. A very different hypothesis was started by Jackson and Hornemann, both of whom affirmed that the universal conviction in Northern Africa was that the N. flows eastward, and joins the Nile, being in fact the Nile itself. The Moors, according to Jackson, expressed their astonishment when they heard Europeans doubting the identity of the two streams. Hornemann also states, that in Fezzan he never met with any one who entertained a different opinion. Browne's opinion was hostile to that of Jackson and Hornemann, and was of still greater weight, as in Darfur that careful observer and recorder approached very near to the track by which the N. must have flowed, in order to reach the Nile. Jackson indeed states that a Moorish merchant of Jenné informed him that he, with some companions, had embarked at that place, sailed down the N. and the Nile, and arrived by water at Cairo; but his details wholly invalidate the inferences drawn from this voyage. The N., he states, was found in many places reduced so low, and sometimes so entirely dried up, that it was necessary to take up their boats and carry them over land. Hornemann too was informed that the communication between the N. and the Nile was very small, except in the rainy season. It is evident that these descriptions could not apply to the stream of the greatest river in the world; that this rivulet, which would not float a boat, could not be the N. after having performed a course of 2,000 m.

Maxwell's theory. A more recent hypothesis, which nearly absorbed every other, was that by which the N. was supposed, after a long course through Central and Southern Africa, to pour itself into the Atlantic by the estuary of the Congo. This was originally suggested to Park by a Captain Maxwell, who, in the character of a slave-trader, had been accustomed to frequent the last-mentioned river; and who founded his opinion on the vast quantity of water which the Congo poured into the ocean, and on a periodical rise taking place in its waters at a period when no rains had fallen on the S side of the line. It was argued also, that to suppose so vast a river as the N. finding its termination in lakes, which there was no reason to suppose of any extraordinary magnitude, was contrary to all analogies observed in other parts of the world; and that while lakes which form the termination of great rivers, and have no outlet, are usually salt, these are stated by the Arabian writers to be fresh. The great chain called the Mountains of the Moon, was indeed supposed to present an insurmountable bar to its progress in this direction; but this chain, it was argued, is laid down upon very arbitrary principles, a great part of it runs through a region entirely unknown to Europeans; and moreover there are repeated instances in which a great river has forced a passage through a formidable mountain-barrier. These and other arguments induced the British government to fit out an expedition to solve this grand question in modern geography. It was divided into two parts, one of which, of a military character, and commanded by Major Peddie, was destined to penetrate across Western Africa to the N., and to descend its stream; the other, of a naval description, was to ascend the Congo in boats. A meeting at some point of the great stream of the confluent river was sanguinely anticipated. The fatal disappointment of these hopes is too well known. The party of Major Tuckey, overcome by fatigue and the heat of the climate, was seized with a pestilential disorder, which proved fatal to most of them. All the leaders also of Major Peddie's party fell a sacrifice to the climate before they had even approached the N. Captain Tuckey's party did not penetrate above 300 or 400 m. up the Congo, they could observe nothing decisive therefore as to its derivation. On its entering its channel, they were struck with disappointment at its apparent paucity of stream, which did not suggest any source so remote as their mission supposed; but on ascending 200 m., it assumed a grander aspect, and spread to the breadth of several miles, and in the beginning of September, it rose 11 ft., without the occurrence of any rains adequate to produce such an effect. The extraordinary

quickness too of this rise appeared to indicate that it had issued from some lake that had received almost the whole of its water from the N. of the line. For these reasons Major Tuckey's opinion leaned very strongly in favour of the hypothesis on which his mission had been founded. Some corroboration of it was also obtained from the narrative alleged to have been given by Sidi Hamet, a native merchant, to Riley, who was shipwrecked on the coast of Africa. The merchant described himself to have followed the course of the N. till it took a SE, and finally a S direction, which it continued to follow at the interior city of Wassanah. It was there reported that a communication took place downwards, and terminated at the sea.

Bowditch and Laing. Mr. Bowditch, during his residence in Ashantee, obtained, from the Moorish merchants of that country, a considerable mass of information, the general scope of which was, that the N., after passing through Lake Dibbie, separates near Timbuctu into three branches. One of these called the Gambara flows ENE through the countries of Houssa and Cassina, till it terminates in the great lake of Caudet or Chadee, probably the Gauga of the Arabians. Another, bearing the name of Joliba, flows N to a country called Yahudi, which carries on a great trade with Timbuctu. The third, or main stream, under the name of Quorra or Quolla, flows ESE through Gauw, Zamfara, Nufi, Boussa, and other countries, till after a long course it also separates. One branch rolling E, and turning to the N. forms the Egyptian Nile; the other flows S, and again separating, pours itself into the Southern Atlantic, by several channels, of which the Congo is the principal. In 1822 Major Laing determined the sources of the Mongo and the Rokelle rivers of the Sierra Leone coast, and penetrated nearly to the sources of the Joliba, the alt. of which above sea-level he conjectured to be about 1,600 ft., thereby conclusively settling one point that it could not flow to the Nile. He traced on his map the first part of its course northwards, and Mr. Caillie's observations—to be presently noticed—harmonize with Major Laing's discoveries at this point, as the point at which he encountered the head-stream of the Joliba continues the tracing of its course.

Clapperton and Lander. The solution of the great problem, already glanced at in the information gathered by Mr. Bowditch, and in part anticipated by the German geographer Reichard, was now at hand. In 1826, Clapperton crossed the N. at Boussa; and his faithful attendant Richard Lander, completed the grand discovery in 1827, by proceeding from Badagry on the coast to Boussa, and there embarking on the river, tracing its stream downwards to the apex of its delta, and finally reaching the sea by one of its deltoid branches, the Rio-Nun.

Actual course. The sources of the N. must lie on the N declivity of the western extremity of the great chain or series of chains, known as the Kong mountains, about the 10th parallel, and to the E of the great mountain-range which separates Senegambia, and its three great rivers flowing W to the Atlantic from the vast inland territory of Sudán. Caillie, on his route from Cambaya to Kankan, in 1828, crossed a stream at Curuassa, a village of Amana, flowing slowly in a wide valley from SW $\frac{1}{2}$ S to ENE, and navigable by large canoes, which he was informed was the head-stream of the Joliba. He was also informed that at that point he was 100 m. from its source, which nearly corresponds with the position of Mount Luma, in the great mountain-range which, diverging from the range running N on the frontiers of Senegambia, bends round the sources of the Scarries, the Rokelle, and Camaranea, all flowing SSW to the Sierra Leone coast. The inhabitants of Curuassa informed him that the river began to overflow in July, and that they can then sail 3 m. over the plain in their canoes. The depth of the river at this point, in the middle of June, was about 9 ft. Caillie was likewise informed that five days' journey S $\frac{1}{2}$ SE of Cambaya lies the frontier of the kingdom of Couranco, in which, "according to the reports of Mandingo travellers, the Dhioliba has its source in that country. I questioned them on the subject, and they at first told me that it rises between Bouré and Yamina. I observed to them that they were asserting what was impossible; but I discovered afterwards that they meant the cataract, which they called *sou-rondo*, and that I had erroneously understood this word to signify 'source' in their language. I drew on the ground a line to represent the river, and, pointing to its origin, asked them how they named that part. They answered *folou* [i. e. 'beginning'] and intimated that they had no other word for 'source.' They assured me that the *folou* of the

Dhioliba is in Couranco; only the Bâ-fing and some other small rivers, they said, rise in Fouta. The Bâ-fing passes through the country of Bondou and runs to N'dar (St. Louis in the Senegal). A journey of a day and a half southward brings the traveller to Fryia, or Firya, which consists of several small villages united. They informed me that the Dhioliba passes that place and is of considerable size there. The first villages of Sangaran lie five days' journey to the SSE. Sangaran and Couranco are large countries like Fouta; the inhabitants are idolaters. These countries, I was told, are divided into a number of small districts, which have their separate and independent chiefs, who are often at war with each other. Some Mussulmans are settled among them. Couranco extends from E to W and to the S of Sangaran, which also stretches from W to E. I was informed that these countries are mountainous and very fertile. The small country of Kissi-kissi lies to the W of Couranco, at the distance of ten or twelve days' journey from Cambaya, and in the environs of Sierra Leone." It would have been satisfactory had Caillie's route accompanied the stream from this point northwards to Bammaku, to which point Park had traced it upwards from Sego; but the French traveller pushed on towards the SW, and did not direct his steps northwards until he reached the meridian of Time. He however crossed various streams, all flowing towards the N, in his progress through the Wassalu territory, between Curnassa and Time; and these were probably feeders of the Joliba. Between Bammaku and Sego, Park found the river flowing in a NE direction, in a wide, well-cultivated valley; a little before it reaches Sego, the river bends more towards the E, but continues flowing through a level rich country, with a moderate current, as far as Silla. In his second journey, Park, embarking at Sego, descended the river as far as Boussa, where his career was unfortunately cut short. It is to Caillie's narrative we are indebted for our knowledge of the stream from the Jenné to Timbuctu. According, however, to this traveller, the Joliba, shortly after passing Sego, divides into two branches of nearly equal breadth and depth. Of these, one runs nearly direct E to Galia, and then turns NNE; while the other, which is the stream passing Silla, pursues an ENE direction, and re-unites with the southern arm a little below Runa and above Isaca. It is on the SE corner of the triangular-shaped island thus included between these two twin-branches of the Joliba that Jenné is situated. Half-way between Jenné and Timbuctu, Caillie, who had now embarked on the stream, and was proceeding downwards by a slow navigation, found the Joliba enter a large lake, called Debo, with several considerable islands in it, through which his course lay in a WNW direction. The river, on re-issuing from this lake, was about 6 m. broad. See article DEBO (LAKE). After emerging from Lake Debo, the river continues to flow for a brief distance NNE, and then, in N lat. 16°, bends round towards the E, and flows towards Timbuctu, when it again divides into two great branches. See article TIMBUCTU. After passing that great central city of Africa, it appears to continue to flow for some distance towards the E, under the name of the Issa or Joliba; and then to turn gradually towards the SE; but its actual course is yet unknown to Europeans from Kalmanna, 130 m. E by S of Timbuctu to Oiogo, 64 m. N of Yaouri, in Boussa, in N lat. 11° 10', where it bears the name of the Quorra or Kawara, and was identified with the river of Timbuctu by Park's last exploratory effort. From Yaouri to the mouth of its deltoid branch, the Rio-Nun, its course, as already mentioned, has been traced by Richard Lander. Between Yaouri and

Raka, its course is nearly S. A little below Raka, in 9° 20' N lat., it turns SE, passes Rabba, Egga, and Kakunda; and at the latter place turns S, and 30 m. below, in N lat. 7° 45', receives its greatest known affluent, the Chadda or Shari, which is generally supposed to convey to it the waters of the great lake Chad or Tsad. See articles CHAD (LAKE), and CHADDA. From the junction of the Chadda to the parallel of 6° N lat., its course is nearly S; but on leaving the Eggarah territory, and entering that of Ibo or Eboe, it inclines to the W. After passing Abob, 95 m. below Iddah, and 130 m. from the mouth of the Rio-Nun branch, it gives off a number of deltoid branches, the principal of which, on the r. of the Rio-Nun, descending the stream, is the Rio-FORCADOS, and on the l., the BONNY and the NEW CALABAR: see these articles. In 1832-34 an expedition under Messrs. Laird and Oldfield ascended the N. to Rabba, and the Chadda to Dagbeh, about 100 m. above its confluence with the N. This expedition was every way disastrous; but an interesting account of it is given in Messrs. Laird and Oldfield's *Narrative* [London: 2 vols. 8vo., 1837]. In 1840-41 an expedition of three well-appointed government-steamers under Captains Trotter and Allen was equally foiled, having only reached Egga, 40 m. above the confluence of the Chadda, before it was obliged to return from the sickness of almost all hands. This last expedition entered the Rio-Nun by Lewis creek. They found the delta at and near the creek split up into a number of islands, or rather clusters of mangrove bushes, for there was not an inch of land to be seen above water. The creek itself was about 100 yds. wide, with not more than 10 ft. water in many places at high tide. As they advanced, the river became broader and deeper—seldom less than 3 fath.—throwing off branches equally deep and rapid to the r. and l. About 10 m. from the sea, the land first assumed a solid form, and became sufficiently elevated to admit of huts, which might be seen here and there with patches of cultivation in their vicinity. At first the natives were exceedingly shy, but as the expedition advanced they became less timid; while the banks attained a greater solidity, and the more elevated parts were occupied with villages and plantations, exhibiting a great degree of comfort and neatness. "The slim, waving mangroves, with their sombre unvarying tints, were now replaced by huge forest-trees of the most variegated and luxuriant foliage, throwing the shade of their gigantic limbs across the stream. In some of the villages the inhabitants were employed in digging out canoes, making paddles, &c.; at others, they appeared to be engaged in the manufacture of earthen jars, pots, &c. In passing these villages," says Mr. Cook, "the natives generally greeted us with a cheer of welcome, and as often as they had opportunity, came alongside in their canoes, without exhibiting the least sign of suspicion." The river below Abob varied from 1,000 to 500 yds. in breadth, seldom exceeding the former, or less than the latter; several of the branches running off to the SW appeared of equal magnitude with that by which the expedition ascended, more especially one about 20 m. below, and another about the same distance above Abob. The latter had a depth of from 8 to 10 faths. across it, and "if ever examined will most probably be found to be a continuation of the Formosa, and will afford a shorter and better channel into the main stream, than that by which the expedition entered." It was afterwards found that the natives on the r. bank above Abob were subjects of the king of Benin. After passing Abob, the river expands into the form of a lake, thickly studded with islands, in some places 2 m. across. The Bonny branch, which is very small,

runs off to the SE, a few miles beyond Aboh. The river preserves this lake-like appearance nearly all the way to the high land, a distance of from 50 to 60 m. The deepest channel was found on the W or r. bank, where the current was never less than from 3 to 3½ knots per hour. The speed of the steamers in the river was estimated at 5½ knots, so that in reality they only went over the ground about 2 knots per hour. On entering what may properly be termed the vale of the N., the river is confined within narrower bounds: and the ground gradually rises on both banks till it has attained an elevation of about 300 ft. "A belt of trees, as if planted by man, runs along the margin of the river, and another, with equal regularity, crowns the ridge of the hills; the intermediate space is interspersed with boulders and studded with clumps of trees, round which the grass is beautifully green, and gives the whole the appearance of a gentleman's park. A few miles beyond this the N. is joined by a river from the NE; this stream appears to be deep and rapid, with high land on both banks. Proceeding onwards for a short distance, the country again becomes low and swampy, it again assumes the appearance of a lake: the banks and islands, which are numerous, are all flooded, and the high land only visible in the distance. In this state it continues to some miles beyond Iddah, where it again narrows to about a ½ m. From thence upwards to the confluence there are few islands, and the river is very beautiful, washing in its course the base of the Kong mountains. It varies in breadth from 500 to 1,500 yds., with a depth of from 3 to 15 faths, and a current of 3½ knots. On each side of the Chadda, at the confluence, there is a tract of low swampy country, and a number of sand-banks in the river, which renders the navigation a little difficult." The N. is called by the natives *Uchiminy-fu-fu*, i. e. 'White water'; the Chadda, *Uchiminy-du-du*, 'Dark water.' From the great breadth of the N., between Aboh and Iddah, with its numerous sand-banks and islands, it is difficult to keep in the right channel when the river is in full flood, and the navigation must be dangerous when the water is falling. The best time to survey the river with accuracy, and to ascertain the best channel, would be when it is at the lowest, which is from January to April. This, says Mr. Cook, would also be found the healthiest season. As the bed of the river consists of sand, the channel will most probably be found to shift from year to year. Though the river assumes the form of a lake when in flood, yet there is good reason to suppose that when low its waters will be found concentrated in one narrow channel, deep enough, it may be presumed, to be navigated by steam-vessels drawing from 5 to 6 ft. water. In passing up the river, treaties were entered into with the chiefs of Aboh and Iddah, having as their basis the total suppression of the slave trade, the abolition of human sacrifices, and the establishment of commercial relations between their people and her majesty's subjects. "On these treaties," Mr. Cook admits, "no dependence can be placed, because, in the first place, it is very doubtful whether the chiefs possessed the power of making treaties; and, secondly, because it is quite certain that they have no means to enforce them. The chief of any village on the N. would readily have entered into a similar treaty, had he been applied to, merely that he might obtain a present. To render these treaties available, resident agents should be established at the principal towns on the river, with an armed steam-vessel at their disposal." The authority of the chiefs in the lower part of the river is exceedingly limited, and little more than nominal beyond the town in which they reside. It being an object

of the expedition to establish a model farm for the purpose of instructing the natives in agriculture, on the arrival of the expedition at the confluence of the N. and Chadda, a suitable piece of land was selected for this farm, and the erection of a fort near it for the protection of the settlement. The soil of this new settlement, called Mount Pettèh, was found to be very indifferent, but the situation possessed advantages that could not be overlooked. It commands a view of many miles up the Chadda, as well as up and down the N. This settlement was soon broken up; but so far the objects of the expedition had been attained, and everything promised a favourable termination to the mission. "It had been arranged that on leaving the confluence, one of the steamers should proceed up the Chadda as far as it could without endangering its return, for the purpose of making treaties with those chiefs who might be willing to do so. The other two steamers were at the same time to proceed up the N. for the same purpose, as far as it would be found navigable; after which it was intended to proceed in the galleys to Timbuctu, and as much higher as they could get. The *Amelia* was to have been left at the confluence to protect the settlement. These arrangements were rendered abortive, and the further progress of the expedition arrested by the fearful sickness which broke out on board all the vessels, and within 19 days spread to such an alarming extent that two-thirds of the original crew were affected by it." It differed from the yellow fever of the West Indies, and, indeed, from anything of the kind which the medical gentlemen attending the expedition had ever had experience of. The expedition now [1853] being conducted in the interior of Africa under Doctors Barth and Overweg, will, it is hoped, add much to our knowledge of this river, or at least of its great affluent the Chadda. That this immense river extends right to the heart of Inner Africa was conjectured, but the supposition has been confirmed, says Mr. Petermann, "by the actual exploration of Dr. Barth, who, in his journey to Adamana crossed the Benue, a splendid river, a ½ m. broad, and 10 ft. deep, which he ascertained to be the upper course of the Tchadda. From all that Dr. Barth says in his last, as well as in his previous letters, I am inclined to think," adds Mr. Petermann, "that the Tchadda will eventually form the natural and most important line from the W for spreading commerce and civilization into the very heart of Inner Africa, and extinguishing the slave trade by extending European influence to the sources of the slave supply. The sheikh of Bornu has repeatedly expressed to the two travellers his desire of forming a closer bond of friendship with the English for the purpose of establishing a peaceful and regular commerce and abolishing the slave trade, and the best proof of his sincerity towards the English is the kind and generous manner in which he has at all times treated their representatives. The kingdom of Adamana, situated in the valley of the Upper Tchadda, with its pastoral and agricultural pop., is spoken of as the most beautiful country in Central Africa, and as such may probably become the key to the interior of that continent. At present the town of Kano, situated between the Kawara [Quorra] and Lake Tsad [Chad] is the great mart of the interior; there the English merchandise coming from the N. by the very tedious and imperfect roads through the Great desert, meets with the American merchandise coming by steam up the Kawara from the S, where, as is well known, American influence is spreading fast. The Great desert will ever form a natural barrier, and prevent the establishing of European commerce of any considerable magnitude; it is to the Kawara

and the Tchadda, and more particularly the latter, that we must look as the means of a ready access into the virgin countries and the inexhaustible natural wealth of Inner Africa."

NIGG, a parish forming the most southern part of the E coast of Ross-shire. It extends north-eastward, and is nearly all peninsulated. The hill of Nigg extends along the Moray frith to Dunskeath at the point of the peninsula, and there beetles up in what is called the North Sutor of Cromarty. This hill is about 5 m. long, and 1 m. broad; and varies in height from 300 to 500 ft. Its coast-side breaks sheer down in rocky cliffs often 300 ft. in height.—Three fishing-villages in the p. have jointly about 430 inhabitants, and upwards of 30 fishing-boats. The largest is Shandwick, with a pop. of about 190. Pop. of p. in 1831, 1,404; in 1841, 1,426.—Also a p. in the extreme NE of Kincardineshire, bounded on the NW and N by the river Dee, which divides it from Aberdeenshire. Area 3,376 acres. The NE corner forms the *ness* or promontory called **GIRDLENESS**: which see. A bold breast of rock from 60 to 80 ft. high, covered with grass and herbage, overhangs the sea along all the E coast. The bay of Nigg, immediately S of Girdleness, is of semicircular form, and nearly a $\frac{1}{2}$ m. in diam. The principal villages are Cove and Torry, with a pop. of 400 and 370. The other villages are Charlestown, with a pop. of 200, and Burnbank, with a pop. of 60. Pop. of p. in 1831, 1,648; in 1841, 1,642.

NIGHT, an island off the NE coast of Australia, in S lat. $13^{\circ} 13'$, E long. $143^{\circ} 28' 40''$. It is a low woody island, about 2 m. long, and a $\frac{1}{2}$ m. in breadth.

NIGHTINGALE, an island of the S. Atlantic, in the group of the Tristan-d'Acunha islands, in S lat. $35^{\circ} 29'$, W long. $11^{\circ} 8'$. It is about 8 m. in circumf., and has good anchorage to the NE. To the S are several rocky islets.

NIGRITA, or **NEGLITZA**, a town of Turkey in Europe, in Rumelia, in the beglik and 14 m. SW of Seres, and 36 m. NE of Salonica.

NIGRITIA, or **NEGRO-LAND**, a name sometimes applied by Europeans to a portion of the African continent, of which, however, the various parts have only an imaginary connection. The natives by no means consider the territory called by this name as forming a whole; and even Europeans are far from being unanimous concerning the extent of country to which this appellation is to be applied. The territory generally denominated Nigritia is bounded on the N by the Great desert; on the W by Lower Guinea; and on the S by the river Mesurada and the mountains of Kong. The eastern boundary is undetermined. It contains some of the chief rivers of Africa, the Senegal, the Gambia, the Rio-Grande, and the Niger. The proximity of N. to the equator assures us that it must be a warm region; the heat, however, is seldom excessive. The country is not generally mountainous, but it is interspersed with numerous inequalities, which tend to give a circulation to the atmosphere, and the more elevated situations enjoy a temperature which is said to be agreeable even to Europeans. The rainy season, which commences in June, is introduced by violent tornadoes, and continues till November. During this season the wind generally blows from the SW. The prevailing winds during the dry season are from the NE. The *harmattan*, a wind of a very singular nature, prevails here as in other parts of Africa. The animals found in this extensive tract of country are nearly the same as those in other quarters of the African continent. N., like all tropical countries, abounds in fruits; but it seems to want several of the species which in America are found under the same latitude. Park did not observe here either the sugar-cane, the coffee, or the cocoa-tree; and the pine-apple was equally unknown. A few orange and banana-trees are seen near the sea, but they may have been introduced by the Portuguese in their early visits to this coast. Among the vegetable productions, none are more remarkable than the lotus, which furnishes the Negroes with a sweet liquor and a species of bread; and the *shea*, a tree resembling the American oak, of which the fruit, when dried in the sun and boiled in water, yields a species of vegetable butter. This butter forms a great article of inland commerce. The common species of grain are the same as those cultivated in Guinea. Many parts of N., like several districts of Guinea, are productive of gold; but it does not appear that the Negroes have anywhere opened mines. After the annual inundations have subsided, a number of people employ themselves in washing the mud which the streams have brought down from the mountains, and separating the small particles of gold, generally called gold-dust. The auriferous sand is

not always procured from the bed of a river, but is sometimes dugged from such veins of earth as are thought likely to contain the precious metal. Park informs us that, in a proper soil, a party with ordinary diligence may collect in one season as much gold-dust as in value amounts to the price of two slaves. The greater part of this gold is given to the Moors in exchange for salt. Malte Brun is of opinion that the Arabs had penetrated into N. at a period long antecedent to the time of Pliny and Ptolemy. Ritter regards Central Africa, especially the Sudan districts, as that part of the world in which the primitive forms, so to speak, of the human race, its physical development and manners, may best be traced! The pop. of such parts of N. as have been visited by travellers, appears scarcely to be proportional to the fertility of the soil; yet towns are numerous, and many of them of considerable magnitude. The coast has fewer inhabitants than the interior, a circumstance doubtless in part owing to the greater unhealthiness of the former. The same cause has retarded the pop. of the banks of the Senegal and Gambia. The Negro tribes of which Europeans have most knowledge are those between the Great desert and the Bight of Benin. The tribes bordering on the desert in the N part of Nigritia are much further advanced in civilization than those bordering on the ocean. The empire of the Ashantees does not date far back, yet it is apparently the first state among the Southern Negroes which comprehended more than one town or tribe. The Negro dynasty of Timbuctu, on the other hand, appears to have ruled over an extensive territory as early as the 11th or 12th cent. The governments of Bornu and Saccata, in the NW, also present a favorable contrast to that of the Ashantees; and it is alleged that all revolutions among the petty African states proceed from the N. The rich and enterprising traders, moreover, are from the N, and make ventures among the southern tribes as among barbarians, by trading with whom for their raw produce great gains are to be got at considerable personal hazard. "This superior civilization of the Northern Negroes is found to arise in a great measure from their intercourse with the Arabs. The most intelligent and enterprising of the Negro tribes, and the most intelligent and enterprising individuals among the rest, are generally found to have embraced the Mahomedan religion. Even where it is not avowed, many of its moral doctrines, and many of the political institutions of the Mahomedans, are found to have penetrated. The titles of dignity in the villages of many of the idolatrous Negroes are corruptions of those which prevail among the Arabs on the coast of the Red sea. Since the time that the Portuguese passed Cape Bojador, the intercourse of European Christians with the Southern Negroes has been as close and frequent as that of the Arab Mahomedans with the Northern. The nature of that intercourse has not been very dissimilar—an interchange of peaceful traffic, violent kidnapping of slaves, and occasional fits of religious proselytism. How comes it that the Negroes who have come in contact with the Arabs have been so much more benefited than those who have come in contact with the Europeans? The Negroes, though regarded by the Arabs as an inferior race, much the same way as by the Europeans, have nevertheless been treated by them in some respects more on a footing of equality. By the law of Mahomet, no true believer can be made or kept a slave. This law has doubtless been often evaded, but not always. The peculiar character of slavery among Eastern nations was often favourable to the observation of the law; the confidential slave being easily received into the bosom of a family, or raised to high employments in the state. These circumstances have kept the line of demarcation between the Arab and the Negro less sharp and harsh than that between the European and the Negro. But, perhaps more than anything else, the pilgrimage to Mecca, incumbent upon every good Mahomedan, has proved an effective instrument for carrying civilization into the heart of Africa. Such religious journeys have from all antiquity been combined with mercantile speculation. Among rude nations this was necessarily the case; for it was only by barter that the pilgrim could obtain the means of subsistence; and this necessary traffic suggested and kept alive the desire of trading for profit. The wealthier Negroes became thus accustomed to travel as merchants; the poorer were obliged to support themselves during the pilgrimage by labour. At Jidda and at Mecca, while awaiting the great festival days, they work for their livelihood, and also to acquire the means of travelling back to their own country. Some of them extend their travels to Medina, to Jerusalem and Cairo, partly out of religious considerations, partly for the sake of gain. The Negro visits Mecca, quite as often, it may be, from a spirit of enterprise or love of gain as from religious motives, contracts practically superior notions and habits to what he could have gained at home. The Mahomedan religion has been spread in Africa not so much by Arab missionaries as by Negroes who have caught it, if we may use the expression, by living for a time among Mahomedans." See article NEGROES.

NIGUA, a town of Hayti, 12 m. SSW of Santo Domingo, on a small river of the same name, near its entrance into the Caribbean sea. Pop. about 2,500.

NIJAR, a town of Andalusia, in the prov. and 18 m. ENE of Almeria, and partido of Sorbas, at the foot of the Sierra-Alumilla. Pop. 5,820. It has a parish-church and a custom-house, and possesses manufactories of blankets.

NIJED, a town of Arabia, in Yemen, 165 m. NW of Sana, and 24 m. NE of Abu-Arish.

NIJNAIA - OZERNAIA - KREPOST, or 'the Lower fort of the lakes,' a fort of Russia in Europe, in the gov. and 57 m. WSW of Orenburg, on the r. bank of the Ural. It is so named from the number of lakes with which it is surrounded. It is enclosed by walls constructed of wood, and contains about 150 houses.

NIJNY, NIJNE, NIJNII, and NIJNAIA, Russian words signifying 'lower.' For names with which they are compounded, not found in the following list, see the other name.

NIJNY-DEVITZK, a town of Russia in Europe, capital of a district, in the gov. and 33 m. WSW of Voronej, on the r. bank of the Devitzka. Pop. 1,900. It contains 2 churches. The district is generally fertile, and raises large numbers of cattle and of bees.

NIJNY-NOVGOROD, or NISNIYI-NOVGOROD, or more briefly, NIJGOROD, a government of Central Russia, lying between the parallels of $54^{\circ} 26'$ and $57^{\circ} 6' N$, and the meridians of $41^{\circ} 40'$ and $46^{\circ} 38' E$; and bounded by the gov. of Kostroma on the N; by Viatka, Kazan, and Smolensk, on the E; by Penza and Tambov on the S; and by Vladimir on the W. It has an area of 42,432 sq. versts, or 18,500 sq. m. nearly. Pop. in 1841, 1,103,200; in 1846, 1,178,200, chiefly Slavonians, and of the Greco-Russian church; but about three-tenths are Tartars. Forming a part of the great plain of Russia, the surface of this gov. is diversified only by slight undulations; it has a productive soil, with a temperate climate. There is, however, a wide difference between the character of that part of the gov. which lies to the N of the Volga, and that to the S. That river, which has here a breadth of two-thirds of a mile, forms in fact a line of demarcation between two totally distinct regions. On its r. bank, steep cliffs show the termination of the plain towards the S, which has an average elevation above the river of 150 ft., and is everywhere well-adapted for tillage, and productive. But N of the Volga, plains of little elevation extend far and wide, and the sandy soil affords only scanty crops. On the S plateau, garden-vegetables, apples, and plums grow freely; on the N, there is no garden-cultivation, though the elevation of the surface does not exceed 200 Parisian feet above mean sea-level. The chief sources of employment are the raising of corn and hemp, the rearing of cattle, and fishing in the rivers and lakes; but manufactures also are more flourishing in this quarter than in most other parts of the empire. They are mainly directed to preparing for sale the raw produce of the country, such as tanning different kinds of leather, making soap and potash, refining tallow, and weaving canvas and coarse linens. Great numbers of cattle and horses are reared. Besides the advantages of a central situation, this prov. is traversed by the Volga, and by its affluents the Vetluga, the Sura, and the Oka, and has direct communication by water both with Moscow and St. Petersburg. Steamers communicate by the Volga with Astrakhan, and by the Kuma with Perm. The exports are corn, hemp, leather, soap, tallow, canvas, salt, iron, and copper. This gov. is divided into 11 circles, and in 1853 contained 13 towns with a united pop. of 54,795. The principal towns are the cap. of the same name, Balakna, Jadim, Perevez, Arzamas, and Potshinki.

NIJNY-NOVGOROD [*i. e.*, 'Lower Novgorod'], a large and thriving commercial town, the capital of the above gov., situated on a triangular height at the confluence of the Oka and Volga, on the r. bank of both rivers, in N lat. $56^{\circ} 19' 43''$, E long. $44^{\circ} 0' 58''$, 265 m. ENE of Moscow. It consists of two divisions, one stretching along the face and at the foot of the high ground which forms the S bank of

the Oka; the other, and principal part of the city, occupying the top of this elevation, and commanding a view over a wide plain of corn and forest-land. The dwelling-houses are built here, as in the interior of Russia, generally of wood, but the shops and warehouses are more substantial. Small as the stationary pop. is, it contains 38 churches of great size and beauty, a couple of monasteries, and a nunnery. The public buildings are very elegant. The stationary pop. of the town is about 30,000; but during its fair upwards of 200,000 persons are collected within and around it. By means of the two rivers it maintains an easy communication with the richest agricultural and manufacturing provinces of Russia. The productions of China are carried during the month of September over the Baikal lake, and in spring reach the Volga along with the Siberian caravans. The productions of Astrakhan, Persia, and Bokhara ascend that river, while those of Petersburg, Germany, England, and France descend it, so that the productions of the East and West meet as in a common centre at Nijny-N. Since 1816, the largest annual fair in Russia has been held here, Makarief, 54 m. lower down on the Volga, having been destroyed by fire in August of that year. Some idea may be formed of the quantity of business transacted at the great fair of Nijny-N., from the results of the fair in 1849. The transactions in that year, we may premise, are stated to have been less satisfactory than those of 1848. The price of tea in particular was 20 per cent. higher, and injuriously affected the trade in other articles. Money was scarce, owing to the recent stagnation of the corn trade, and the payment for two-thirds of the aggregate purchases is said to have been deferred for periods of 12, 18, and even 24 months. With these drawbacks, the total value of the domestic articles at the fair was £7,916,016. The following found a sale:—Raw materials, £1,917,940; provisions, £858,684, and domestic manufactures, £3,981,716; the total sales of domestic articles amounting to £6,758,340, leaving £1,157,676 unsold. The total foreign articles at the fair amounted to £2,430,191, of which 493,955 worth of European raw materials found a sale, and £204,888 of manufactures. Asiatic articles sold to the extent of £1,329,131; the total sales of foreign articles being £2,027,944, leaving £402,217 unsold. So that in fact the total value of both domestic and foreign articles at the fair was no less than £10,346,207, of which £8,786,314 found buyers, and £1,559,893 remained unsold. Schnitzler and the other authorities state the annual value of goods sold here at 125,000,000 roubles, or £5,000,000 sterling; but Mr. Bremner was assured by a gentleman filling a high situation, that this is only the official value given in to government by the merchants, which always falls short of the real value sold. "It is notorious," he says, "that in order to escape the payment of part of the duties, the merchants never give the true value of their stock." There has also been a great increase since the time to which this statement relates; so that the real amount of money turned over in the place may now be fairly estimated at 300,000,000 roubles, or £12,000,000.

Fair. The fair is held without the city. Mr. Bremner thus graphically describes it: "After passing the gates not a single symptom of the fair had we seen. Turn this way, however; from the Volga and Asia look in another direction—across the Oka—and there, on a low almost inundated flat, exposed to the waters of both these rivers, lies a scene of bustle and activity unparalleled in Europe. A vast town of shops laid out in regular streets, with churches, hospitals, barracks, and theatres, now tenanted by more than a hundred thousand souls, but in a few weeks to be as dead and silent as the forest we have been surveying; for when the fair is over, not a creature will be seen out of the town, on the spot which is now swarming with human beings." The spacious plain between the two rivers was pitched on as a convenient site for the fair, and in preparing it for the

object view the difficulties presented by the swampy nature of the ground were overcome by the enormous outlay of 40,000,000 roubles = £1,670,000. Deep sewers, vaulted over, were constructed through the morass, and connected by canals with the rivers. The buildings for the bazaars were raised on piles, and the whole boggy surface of the plain was covered to the depth of some feet with gravel and clean sand; so that, notwithstanding the inundations to which it is still liable, it almost perfectly dissembles its untoward nature. In the midst of the plain is the great bazaar, divided by lanes or passages, intersecting at right angles, into 64 square groups of warehouses, or rectangular blocks of solid stone buildings of one story in height, and containing, besides some public offices in the centre, 2,522 large vaults for merchandise, to each of which is attached a small chamber for the merchant. Round the public offices in the centre are ranged, during the fair, the European wares, the French millinery, and English broadcloth. Next follow the Armenians, a numerous and distinguished class in every commercial assemblage throughout the East. Near these the Bokharians usually range themselves, who are easily distinguished from other Asiatics, says our author by their squat corpulent figures and dark complexions. Nearly a whole side of the bazaar is occupied by the Chinese market, in which the shops are all laid out in the Chinese fashion, though we believe that but few of the subjects of the Celestial empire actually frequent the fair. Tea is the chief article of the Chinese trade. Beyond the stone buildings of the bazaar commence rows of wooden booths, in which the motley Siberian and Tartar tribes establish themselves with their furs and peltry. The most remarkable to a European eye, though not the least common of their wares, being the dark mouse-coloured hide of the wild-horse, with black mane and streak along the back, much prized by the Bashkirs and other tribes for its warmth as well as beauty. "Most of the streets have elegant light arcades on each side, supported in front by cast-iron columns, where purchasers can walk about, well-sheltered in all kinds of weather, to view the tempting displays in the windows. The shops are generally very handsome, and in some instances extend from street to street, so as to have two fronts. They present nothing of the confusion of a fair; the goods of every kind are as neatly ranged as in a city. To facilitate business, there is a separate quarter set apart for each different kind of the most important description of goods. One quarter contains groceries, of which the value sold is very great. In another fish and caviar are exposed in most fragrant variety; of these about sixty thousand pounds' worth are sold at each fair. A third quarter contains leather articles of every kind, which may be bought surprisingly cheap, but in particular boots and shoes are disposed of ready-made in large quantities. Morocco leather is also sold wholesale to a very large amount; a great deal of it comes from Astracan, where—as in other parts of European Russia—goats are kept for the sake of their hides to make this leather, more than for milk or flesh. The agreeable soap of Kasan is sold to a large value. Iron articles from Tula and glittering arms of every description occupy a conspicuous share of the streets. The cloth-range is also large and well-stocked; the value of woollen-goods, Russian and foreign, sold annually, is seldom less than 3,000,000 of roubles = £120,000. But one of the most curious of all is the tea-quarter, which occupies the greater portion of an immense division standing by itself. This is one of the most singular corners, not only from the number of Chinese seen in it, but also from the great amount of cash turned over by them. The chests are all sewed into tough skins. One quarter contains ready-made clothes of all descriptions; the cloaks both for men and women are made from stuffs with the most singular patterns. Some of the figured works from Asia are really beautiful. The quarter for fancy articles—gloves, handkerchiefs, ribbons, &c.—is always crowded with purchasers, attracted by the graces of the fair occupants from the Rue St. Honore. The division for wines is not very large. That for cotton goods appeared to be very valuably stocked. Most of the articles had an English look; but among the thousands of dealers assembled here from all other towns we met with only one countryman. Of cotton goods, Russian and foreign, the value sold generally averages 22,000,000 roubles = £880,000. The greatest display of all is among the numerous shops for silks and shawls. Most of these articles being of oriental manufacture, the patterns far outshine even the waistcoats of our modern beaux. The manufactured silks here disposed of every year are estimated at 10,500,000 roubles = £420,000—while of raw silk 368,000 lbs. are sold. Nothing surprised us more, however, than the furniture-shops; costly tables, chairs, sofas, all the heaviest articles of furniture, brought in safety to such a distance, and over such roads, were what we did not expect to meet even in this universal emporium. Large mirrors, too, from France as well as St. Petersburg, and crystal articles from Bohemia, were displayed in great profusion; and many a longing eye might be seen near the windows of the jewellers and silversmiths, who are said to do a great deal of business, not only in selling their home-made articles, but also in buying jewels brought from Asia."

NIJNY-TAGELSK, or **TAGILSK** (**НИЖНИ**), a town of Russia in Asia, in the gov. of Perm, and district of Werkhoturie, on the Tagil. It is well-built, and has several hospitals, an observatory, extensive iron-works, and manufactories of machinery.

NIJROW, a valley of Afghanistan, in the Kohistan of Cabul, to the E of the valley of Panjshir. It

is very fertile, and well cultivated. It is inhabited by Tajiks and Pashai. The former are supposed to be of Persian descent; the latter bear considerable resemblance to the natives of Kafiristan.

NIKDEH. See **NIGDEH**.

NIKHOUS, a town of Algeria, in the prov. and 120 m. SW of Constantina, to the NE of the lake Al Shott. It is now in ruins.

NIKITA, a village of Russia in Europe, in the gov. of Taurida, in the Crimea, district and 39 m. S of Simferopol. It has a fine terraced garden, constructed by imperial order, for the promotion of the culture of tropical productions.

NIKITINSKAIA, a fortress of Russia in Europe, in the gov. of Yekaterinoslav, district and 20 m. ESE of Alexandrovsk, and 18 m. NW of Orkhov, on the r. bank of the Konskaia.—Also a town in the gov. and district and 47 m. ENE of Orenburg, on the l. bank of the Sakmara.

NIKITOVKA, a town of Russia in Europe, in the gov. and 41 m. WNW of Kharkov, district and 10 m. W of Bogodoukhov.—Also a town in the gov. of Voronej, district and 36 m. ENE of Jalyki.

NIKITSK, a town of Russia in Europe, in the gov. and 22 m. SSE of Moscow, district and 12 m. ENE of Podol, on the Pakra. Pop. 750. In its vicinity are extensive stone quarries.

NIKLASBERG, a town of Austria, in Bohemia, in the circle and 30 m. W of Elnbogen, and 14 m. NNW of Eger. Pop. 571.

NIKLAŠMARKT. See **GYERGYO** - **St. MIKLOS**.

NIKLOWITZ, or **MIKOLOWICE**, a town of Austria, in Moravia, in the circle and 8 m. N of Znaym. Pop. 796.

NIKOLA (**SAINT**), a town of the archd. of Austria, in the prov. of Lower Austria, and circle of the Muhl, 27 m. SE of Freystadt, on the l. bank of the Danube.

NIKOLAEVKA, a town of Russia in Europe, in the gov. and district and 24 m. S of Yekaterinoslav, on the l. bank of the Dnieper.

NIKOLAEVSKA, a town of Russia in Europe, in the gov. and 90 m. SSW of Saratov, district and 60 m. NW of Kamychin, on the l. bank of the Medveditzka.

NIKOLAEVSKAIA, a town of Russia in Europe, in the gov. of Saratov, district and 5 m. ESE of Kamychin, on the l. bank of the Volga.

NIKOLAEVSKAIA - KREPOST, a town and fortress of Russia in Asia, in the prov. and 75 m. W of Omsk. It is situated in the midst of a marsh surrounded with wood, and is extremely unhealthy. It contains about 150 houses. The fort forms one of the Ishim line.

NIKOLAI, or **MIKOLOW**, a town of Prussia, in the prov. of Silesia, in the reg. and 56 m. SE of Oppeln, circle and 15 m. N of Pless. Pop. 3,320.

NIKOLAIIEV. See **NICOLAEFF**.

NIKOLAIIEV, a town of Russia in Europe, in the gov. of Podolia, district and 14 m. NW of Proskonov, and 66 m. N of Kamenez. Pop. 1,870.—Also a town in the gov. of Vilna, district and 48 m. SSW of Oshmiana, and 18 m. NNE of Novogrodek, on the r. bank of the Niemen.

NIKOLAIIEVCHINA, a town of Russia in Europe, in the gov. and district and 54 m. SW of Minsk, and 45 m. ESE of Novogrodek, on the l. bank of the Niemen.

NIKOLAIIEVKA, a town of Russia in Europe, in the gov. of Poltava, district and 14 m. N of Zolotonocha, on the l. bank of a river of that name.—Also a town in the gov. of Voronej, district and 27 m. SSW of Astrogjsk, on the r. bank of the Tikhiaia-Sosna.—Also a town in the same gov., in

the district and 21 m. NE of Valyki, on the l. bank of the Polatovka.

NIKOLAÏKEN, a town of Prussia, in the prov. of East Prussia, regency and 68 m. SW of Gumbinnen, circle and 14 m. SE of Sensburg, on the W side of lake Spirding. Pop. 2,040.

NIKOLAJOWSK, or **SAINT NICOLAUS**, a fort belonging to Russia, on the coast of Imeritia, at the mouth of the Natanebi, 15 m. SSE of Poti. It was taken by the Turks in October 1853.

NIKOLAPAVDINSK, a town of Russia in Europe, in the gov. and 180 m. NNE of Perm, 60 m. W of Verkhotur, on the l. bank of the Lialia.

NIKOLSBURG, or **MIKULOW**, a town of Austria, in Moravia, in the circle and 27 m. S of Brunn. Pop. 8,000, of whom a large proportion are Jews. It has a fine castle, and a valuable library belonging to the princes of Dietrichstein, a college, a theological seminary, a lyceum, a gymnasium, and a public library and museum. The environs afford excellent wine, and contain several marble quarries.

NIKOLSK, a district and town of Russia in Europe, in the gov. of Vologda. The district comprises numerous lakes and marshes. It is well-wooded and moderately fertile. The manufacture of articles in wood and of mats, the rearing of bees and the chase form the chief occupations of the inhabitants. The town is 210 m. E of Vologda on the r. bank of the Jong. Pop. 650.

NIKOLSKAIA, a town of Russia in Europe, in the gov. of Olonetz, district and 26 m. S of Kargapol, on the E bank of lake Latsha.—Also a town in the gov. and 36 m. S of Riazan, district and 1 m. W of Pronsk, on the l. bank of the Pronia.—Also a town in the gov. of Voronej, district and 54 m. NNE of Bogouchav, and 18 m. ENE of Pavlovsk, on the l. bank of the Podgoraia.

NIKOLSKAIA (STANITZA), or **NOVAIA-KARGATA**, a town of Russia in Europe, in the gov. and district and 99 m. ESE of Orenburg, and 66 m. W of Orskaia, on the Ural. Pop. 2,000. It is advantageously situated for commerce, and carries on a considerable trade with Persia and Bokhara. Its inhabitants are chiefly of Tartar origin.

NIKOLSKAIA-SASTAVA, a village of Russia in Asia, in the gov. and district and 39 m. S of Irkoutsk, at the point of the efflux of the Angara from Baikal.

NIKOLSKII-CHAR, a strait of the Arctic ocean running between the small island of Kousova-Zemlia and the S coast of Nova-Zembla. It forms an arm of the strait of Kara, by which the island of Vaigatch is separated from Nova-Zembla.

NIKOLSKOE, a town of Russia in Europe, in the gov. of Voronej, district and 54 m. NE of Starobielsk, and 42 m. SW of Bogouchav.—Also a village and port in the gov. and district of Archangel, on the White sea, at the embouchure of the S arm of the Dwina. It formerly possessed considerable trade; the harbour is now to a great extent choked with sand.—Also a fort in the gov. and district and 93 m. ENE of Orenburg, and 6 m. W of Stanitza-Nikolskaia, on the r. bank of the Ural.

NIKOLTOJ-MANTOROVKA, a town of Russia in Europe, in the gov. of Voronej, district and 11 m. NE of Valyki, and 30 m. SSW of Birionch.

NIKOPOL, a town of Russia in Europe, in the gov. and district and 72 m. SSW of Yekaterinoslav, and 41 m. SW of Alexandrovsk, on the r. bank of the Dnieper. Pop. 1,200.

NIKOPOL, or **TEHINGANI-KAIL**. See **NICOPOL**.

NIKOPOLI, a village of Turkey in Europe, in Rumelia, in the sanj. and 144 m. WNW of Gallipoli, and 5 m. NW of Tzaglaik, on the l. bank of the Karasu.

NIKORITZI, a town of Russia in Europe, in the gov. and 138 m. WNW of Kherson, district and 18 m. NE of Tiraspol.

NIKOUL, a river of Russia in Asia, in Kamchatka, which runs W, and after a course of 24 m. throws itself into the Kamchatka, on the r. bank. The first Russian settlement in Kamchatka was formed on the banks of this river.

NIKOULITZIN, a town of Russia in Europe, in the gov. and 15 m. E of Viatka, district and 12 m. S of Slobodsk, at the confluence of the Tcheptza with the Viatka. It occupies the site of the ancient town of Tchoub-Bolvanskoï-Gorodok, destroyed in 1181 by the Novgorodians.

NIKOUP, a town of Turkey in Europe, in Bulgaria, in the sanj. of Rustchuk, 48 m. SE of Nikopoli and 12 m. N of Ternova, on the l. bank of the Rousita, near its confluence with the Jautra.

NIKSAR, a town of Turkey in Asia, in Asia Minor, in the gov. and 60 m. N of Sivas, and 36 m. NE of Tokat, on the r. bank of the Kuculu-Hissar. It is built on the slope of a hill, but is commanded by a fort constructed by the Genevise. The houses, which are chiefly of wood, are 3 or 4 stories in height and roofed with tile. Some of them are surrounded with gardens. The total pop. of N. is estimated to consist of 600 Turkish families, 120 Armenians, and 60 Greek. The town contains a citadel and several bazaars.

NIKSIKI, a village of Turkey in Europe, in Bosnia, in the sanj. of Herzegovina, 78 m. SW of Mostar, and 60 m. ENE of Ragusa, on the frontier of Montenegro. A little to the W of the village is a small lake of the same name.

NILAB, a town of the Punjab, on the l. bank of the Indus, at the confluence of the Hurra, a little below Attock. The river is here 120 ft. in depth, but narrow, and is crossed by a ferry.

NIL-ABASSE, a commune of Belgium, in the prov. of Brabant, and dep. of Nil-Saint-Vincent-Saint-Martin. Pop. 362.

NILE, the great river of Egypt and of Eastern Africa, composed of the union of three great head-streams, the western of which is the Bahr-el-Abiad or White river; the central, the Bahr-el-Azrek or Blue river; and the eastern, the Takazze or Atbara. It takes the name of the Nile only after the junction of the Bahr-el-Abiad and Bahr-el-Azrek. The former stream—which it is no longer matter of controversy constitutes the larger and principal head-stream of this wonderful river—has its rise somewhere in the mysterious heart of the African continent, probably near the equator; flows towards Egypt from the W or SW; and then runs N, till it is joined by the Bahr-el-Azrek which rises in Abyssinia, and after fetching a large circuit to the SE and then to the SW, in the course of which it passes through the great Abyssinian lake of Dembea, joins the Bahr-el-Abiad in about 16° N lat. From this point the Nile, with the exception of one large bend towards the W, has a N course to its junction with the Takazze, a large river also coming from Abyssinia.

[*Sources.*] The ancients were ignorant of the sources of this river, although it attracted so much of their attention; and the moderns remained long unacquainted with them, though it now appears that the source of one of its principal branches was known to Europeans long before they credited the fact. Bruce, it is true—who undertook a search which was believed to have eluded every former adventurer—assures us that he was the first of Europeans who saw the fountains from which the N. originates; so anxious was he to secure this honour to himself, that he minutely examines the accounts of such travellers as pretend to have visited them before him; and his decision, as was to be expected, is in his own favour. But Bruce's examination of Kircher's account of the sources of the N., plainly evinces that the latter had either actually visited these sources himself, or had received his information from such as had. What were considered the sources of the Bahr-el-Azrek or 'the Blue river,' were found

and described by two Jesuits, Paetz and Teliez, two centuries before the pretended discovery of Bruce: a few differences and inaccuracies detected by Bruce in their account, serve rather to confirm than invalidate the truth of this early visit. Still Bruce met not that applause which he expected, and which his labours deserved; the reception of his narrative, even by his own countrymen, can scarcely be accounted generous. It was first doubted whether he had really ever seen the head of the river which he described as the chief branch of the N.; and when this could no longer be insinuated, it unhappily for him, began to be suspected that he had only visited the head of an inferior branch, and that the true N. originated far to the W. among what was called 'the Mountains of the Moon.' The Messrs. D'Abbadie have recently advanced the opinion that the Gibe of Inyara or Enarea, rising in N lat. $7^{\circ} 49' 48''$, and E long. $36^{\circ} 2' 39''$, must be regarded as the true head-stream of the White N. In opposition to this hypothesis, Dr. Beke contends that the principal sources of the N. must be somewhere S. of the 2d parallel of S lat., and between the 29th and 34th meridians of E long. He argues that the principal sources of the N., according to Ptolemy, are in the country of *Mono-Mozi*, near the E coast of Africa; and that the name 'Mountains of the Moon' arose from a translation of the word *Mozi*, which signifies 'moon' in the language of the Sawahills or 'dwellers on the coast,' from whom the Greek merchants and seamen of Alexandria, trading with India and Eastern Africa, subsequently to the time when they had acquired a knowledge of the Hippalus or SW monsoon, obtained the particulars respecting the Upper N., which are recorded by Ptolemy. He corrects what he conceives to be the fundamental error of Ptolemy's map, viz., its general extension much too far southwards, and shows that the head of the N., which that geographer places on the W side of the country of the *Anthropophagi*, bordering on the *Barbaricus sinus*, in the vicinity of the island of *Menuthias*, must be situated in about 2° S lat., and 34° E long., at the extreme eastern edge of the table-land of Eastern Africa, and at a distance of about 300 or 400 m. from the island of Zanzibar, which island is identified with *Menuthias* by D'Arville, Vincent, and De Frobenius. Among other evidences in support of this conclusion, Dr. Beke refers to the statement of the Arabian geographer, Ibn-el-Wardi, that the N. divides above the country of the Zinj (Zanzibar), one branch going towards Egypt, and the other to the country of the Zinj; suggesting the probability that the latter branch is the river Lufidi, which falls into the Indian ocean in about 8° S lat., and which appears to have some of its sources near those of the N.; and he explains how the contiguity of the sources of these rivers is, according to the native mode of thinking, equivalent to an actual water-communication between the rivers themselves, so that the two would be regarded as branches of one stream. Dr. Beke regards the great central table-land of Eastern Africa as an elevated region of irregular surface, having its line of greatest elevation towards the Red sea and the Indian ocean; the water-shed between the streams flowing into the sea, and those tributary to the N., being along the extreme E limits of this table-land. In his opinion, Ptolemy fell into a very natural error of making the 'Mountains of the Moon' extend from E to W, across the continent of Africa, at right angles with the general direction of the course of the river flowing from them; whereas the actual direction of the E edge of the table-land—which to the Sawahills, or natives of the coast, has the appearance of an extensive range of lofty mountains, and which Dr. Beke identifies with the Mountains of the Moon—is from SW to NE; and by measuring 600 m. in the latter direction—such being about the distance that Ptolemy makes to exist between the two heads of the Nile in those mountains—Dr. Beke hypothetically places in about 7° N lat., and 39° E long., the source of that geographer's second arm of the river. This second arm Dr. Beke identifies with the Sobat, Telfi, or river of Habesh, which joins the Bahr-el-Abiad, or White river, in about $9^{\circ} 20'$ N lat., and which was considered by the officers of the Egyptian exploring expedition, who ascended it 80 m., to contribute to the Nile nearly a moiety of its waters. It is some confirmation of this hypothesis that the Mountains of the Moon of Ptolemy consist of this mountain-range of Eastern Africa which flanks the country of the Unlamezi to the E. instead of being a range stretching across the continent from E to W, that the great snowy mountains KILIMANDJARO and KENIA [see these articles] are known to be portions of a littoral chain to the S of the equator. Of the various head-streams of the river of Habesh, the Wabbi, which is said to rise in the mountains to the S of Shoa, and to join the Godjeb, the upper course of the river of Habesh, coincides in Dr. Beke's opinion, most closely with the head of Ptolemy's second river; and he remarks that, in like manner as the White river is made by Ibn-el-Wardi to branch off to the coast of Zanzibar, the river of Habesh—of which the Wabbi of the table-land is taken by him to be the head—is, at the present day, made by the natives to branch off to the Somali coast by the Wabbi-Giweya, Gowin, or Juba river, which is called 'Nilo,' and also by the Wabbi or 'Nile' of Makdashu [Magadoosh]; and that these three rivers, some of whose sources are contiguous at the edge of the table-land, in about 7° N lat., and 39° E long., all bear, in common, the generic name of *Wabbi*, which in the Somali language, signifies 'the river,' and likewise the not less generic designation of *Nile*. Dr. Beke also notices the fact that the confluence at Khartum, in $15^{\circ} 37'$ N lat., of the White and Blue rivers, commonly, but erroneously in his opinion called the White and Blue Niles, is merely the junction of the *Atsepia* with the *Nilus*; and that, in reality, the confluence of Ptolemy's two arms of the Nile—name-

ly, the White river and the river of Habesh—is in $9^{\circ} 20'$ N lat., upwards of 6° beyond Khartum. While establishing that these two principal arms of that river have their sources at the extreme edge of the table-land of Eastern Africa, Dr. Beke argues further for the existence of a third great arm of the N.—namely, the Bahr-el-Ghazal or Kellah, which likewise joins the central stream in about $9^{\circ} 20'$ N lat., and which, he thinks, there is reason to regard as the Nile of Herodotus and other writers prior to Ptolemy; and he suggests that the latter geographer was drawn away from the separate consideration of this more westerly arm by the error which he had fallen into of placing the one of his two arms of the river to the W instead of the NE of the other, whereby he was led to confound the former with the Nile of Herodotus.

In these views of Dr. Beke, Mr. Ferdinand Werne, who was attached to Mahomed Ali Pasha's exploring expedition, substantially coincides. M. Antoine d'Abbadie, he says, "originally informed us in a letter written on the 17th Oct. 1844, from Adoa in Habesh, to Cairo, that he had discovered the source of the White N. According to the assertion of the fortunate discoverer, the source was then situated in the country of Gannu or Ginnu, near Mounts Boshi and Doshi; but he stated neither the degree of lat. nor of long. of the pretended site of this source. Upon this, I at once contradicted M. d'Abbadie's claim to having solved this geographical problem, and drew the attention of geographers to the discoverer's erroneous etymology of the name of the Mountains of the Moon, upon which he principally based his assertion. [*Monatsberichte* Jahrg. vii. s. 20.] It now seems, however, that this source of M. d'Abbadie's Nile has dried up, or at all events that he has abandoned it, since he no longer mentions this site, but transports the source of the river into quite a different country, namely into the forest of Babia, between Inyara (Enarea) and Jimma-Kaka, in lat. $7^{\circ} 49'$ N, and long. $34^{\circ} 38'$ E of Paris. It so happens that during the expedition which Mahomed Ali, viceroy of Egypt, sent in 1841-42 to explore the White Nile, I navigated the river from its bifurcation in Sennar upwards, as far as the 4th degree of N lat., the furthest point till then reached by any traveller, and there we were told that the sources lay still further to the S. [See *Expedition for the Discovery of the Sources of the White Nile*, by F. Werne.] M. Antoine d'Abbadie establishes three rules, which, according to him, ought to determine the true source of a river—namely, 1st. Universal consent. 2d. The greater volume of water. 3d. In deciding between equal volumes of water, a preference is generally given to that tributary whose direction coincides most nearly with the general course of the lower river. It is, however, remarkable that in his present claim to the discovery of the source of the White N., he altogether discards the first of these laws; for he tells us that the natives near the sources of his White N. assert that all the waters of that district flow into the Abbai [the Blue river]. A tribe which has commercial intercourse with another by means of a direct water-communication, as M. d'Abbadie pretends is the case by means of his hypothetical river, between the inhabitants of Kafa and Enarea on the one hand, and those of Bari on the other, ought, if the same circumstances of climate exist, to possess similar domestic animals, and similar productions and useful articles. According to M. d'Abbadie, Enarea and Kafa, possess coffee, and both horses and mules; but all these are utterly unknown in the kingdom of Bari, in 4° N lat., which was visited by us during our expedition. Again, according to M. d'Abbadie, there are neither sheep, nor fowls, nor leather, in Kafa and Enarea; while all these are met with in Bari. The value of dollars is well known in Kafa; but money is not known at all in Bari. Lakono, the king of Bari, and his companions, pointed to the S when describing to us the situation of the sources of the White N., which river is called Tubbirih in that country. Indeed, from the formation and situation of the mountains whose valleys are watered by the true N., any person looking in that direction would infer the further southerly course of the river for a distance of several degrees of latitude. The natives always pointed to the S when we inquired after the upper course of the river; and they knew nothing of a running stream towards the E, in which direction they hold commercial intercourse with the country of Berr, distant 10 days from Bari, and on the road to which country they meet only with wells. As regards us Europeans," Werne adds, "we arrived in Bari with the preconceived opinion that the White N. came from the east, and we were consequently the more precise and careful in our inquiries; but all our delineations of a curved line towards the E as the probable course of the river could not induce the natives to deviate from their previous statements that it comes from the S. The entire configuration of the mountain-ranges points to a water-parting which Nature has established both on the E and on the W. The mountain-chains of Loyoga and Kugeli both stretch towards the S, being most probably offsets or spurs from an extensive range of mountains near the equator, where the hydrographical system of the Bahr-el-Abiad has its origin. If M. d'Arnaud, my travelling companion on the White N.," continues Werne, "lays down the chief branch of the small streams that form that river as coming from the E, it can only be regarded as a remnant of that opinion which we had preconceived before we reached Bari, and according to which we considered the sources of the river to be in that direction. There never was a question as to a main branch; and Lakono, who asserted that he had been in the country, called by him Anyan (Anyan), in which the head-streams of the N. have their origin, said that the depth of the water in the beds of the four rivulets whose confluence forms that river was such as to reach only to his ankles as he waded through them. It appears, therefore

improbable that any one of such shallow rivulets in the country of Anyan should come from the forest of Babia, a distance of 5° to the N. I might perhaps reject the opinion of the people of Bari as being opposed to my own original persuasion, and might still consider the river to come from the E. if the direction we saw it come from when at the island of Tschanker had warranted such a conclusion; but instead of continuing its course to the S and E, and winding round below the cliffs of Lagi and Kalleri (no doubt the skirts of a lofty mountain-chain), and thence flowing slowly and quietly along by the mountain-range of Loyoga, from the 4th to the 8th degree of N lat., the river comes direct from the mountain-fastnesses in the S, in the form of a turbulent stream escaped from confinement. The general rise of the land, and the numerous rocks in the river's bed, prove that its fall increases considerably as one advances further among the mountains; and the rocky wall of Kalleri is said to form a great cataract during the rainy season, whence one might almost infer the existence of a mountain-lake. The fall of the river among the mountains is no doubt greater than it is where we saw it at Tschanker. Consequently, if we were to regard M. d'Abbadie's forest of Babia as the site of the sources of the White Nile, that forest must be placed at an enormous height; and an uninterrupted connexion of mountain-ridges would be necessary in order to force the river to adopt an unnatural course from N to S, in an elevated longitudinal valley resembling an aqueduct, instead of flowing direct towards the W into the basin which likewise receives the Sobat. It seems to me much more probable that the pretended sources of M. d'Abbadie's White N. are merely those of a tributary of the Blue N. or of the Sobat. It is my opinion, Werne adds, that time will prove Ptolemy, and the natives of Bari, to be correct in their assertions, and that we have to look for the sources of the White N. in the regions near the equator, where we shall likewise find the 'Mountains of the Moon,' though probably under a different name, of which I consider the mountains reached by our expedition to be merely the outskirts."

Mr. Ayrton, in an *Essay on the Nile*, read before the Royal Geographical society, supports the Messrs. d'Abbadie's conclusions. He is of opinion that the material question at issue between M. d'Abbadie and Dr. Beke was not whether this or that river *per se* was to be regarded as the source of the White N., but whether the system of waters of the N. was actually confined to the Abyssinian plateau and the immediately adjacent drainage on its W and S limits; or whether we must assign to the N. a far more extensive drainage, and extend its waters, as contended for by Dr. Beke, into a country to the S of the 2d degree of S lat.—that is, whether the same incidents of climate which produced on the inner and lesser side of the culminating ridge of the Abyssinian plateau, and where the country was to the leeward of the winds which bring rain, the lesser river of the Blue N., did not also produce, on the outer and larger side of the same ridge, and where it was first exposed to the effect of the rainy winds, the larger river of the White N. He contends that if Dr. Beke's opinions were correct, it would follow that instead of the mountains in Inarya and Kaffa, in from 10° to 5° N lat., and 35° to 40° E long., constituting the point of culmination of the eastern part of Africa, we should have to look for the culminating point of that part of the continent to the N of the 2d degree of S lat., and in from 25° to 34° E long.; and that consequently upon the right solution of that question would necessarily depend, to a considerable extent, the correctness of our ideas of the physical geography of Africa. He controverted the objections involved in Dr. Beke's assumption that the derivation to Ptolemy of the name of the 'Mountains of the Moon' was to be sought for in the word *Moori*, because that word signified 'moon' in some languages of Africa, and there happened to be a place of that name more nearly corresponding than Gamaro with the position assigned to these mountains by Ptolemy, by endeavouring to establish that, if due allowance were made for Ptolemy's errors in lat., his position of these mountains would as well accord with M. d'Abbadie's position of Gamaro as with Dr. Beke's position of the country of Monu-Moori. He next controverted the inference that the Arabs translated their phrase *Gebel-el-Qamar* from the Greeks; showing, lastly, that the Arabs were the earliest navigators of the Red sea; and, that there was historical evidence that the Sabahan tribes of Arabia, shortly after the time of Solomon, conquered Abyssinia; and, lastly, that the influence of the language of the Arabs, consequent upon these circumstances, had been such as to justify the presumption that they had applied the name of 'Gebel-el-Qamar' to these mountains long before the era of the Greeks in Egypt. He then examined the evidences in favour of M. d'Abbadie's conclusions, that the White N. rises in Inarya, afforded by the circumstances of the climate, hydrography, and physical configuration of Africa. He contended that, as the mountains of the S part of the Abyssinian plateau intercept the rain of the SW monsoon in what would otherwise be its passage to the mountains of Yemen in Arabia, which are in position within its influence; and as the rain of this monsoon passes over the land of this side of Africa to the SW of Abyssinia, so as to extend quite to Nubia, it necessarily follows that the S part of the Abyssinian plateau is the highest land within the influence of the SW monsoon, and constitutes the culminating point in the NE part of Africa. He then showed that if the N. were assumed to rise to the S of the 2d degree of S lat., the inclination of its bed, calculated upon ascertained data for rather more than the first half of its course, would warrant an alt. for the mountains about its sources of at least 6,500 ft. above the sea, which, reasoning from

the analogous instance of the Syhadri range on the W coast of India, would produce heavy falls of rain as the sun became vertical to such mountains, and therefore occasion a periodical rise of the river at a much earlier period than that at which it is now observed to occur. Finally, Mr. Ayrton argued that the hypothesis of Dr. Beke, of the N. rising to the S of the equinoctial line was wholly untenable. The great drainage of the continent of Africa, the author considered to be on the one side towards the Atlantic, and on the other by the N., towards the Mediterranean, with a comparatively lesser drainage along the E side of the continent into the Indian ocean. Confining his observations to the N., he assumed the tract drained by that river to be bounded on the inland side by the high land stretching from the E flank of the Atlas, southward by the W of Borju and Darfur, until it joined the mountains spoken of by Browne as extending from 13° N lat. along the direction of the 25th meridian, to 8° N lat., and thence turning round to the E as far as long. 28°, whence the same mountains were supposed, upon some authorities referred to by the author, to extend to the W bank of the White N., in 4° 42' N lat., and follow the bend of its outer tributaries, until they united with the most southern and eastern part of the Inarya mountains. The author, however, admitted that the whole argument was professedly one of probability, and that the question would not perhaps be finally solved until the gap subsisting between the observations of M. d'Abbadie and the termination of the journey of M. D'Arnaud was filled up.

The White Nile. The course of the White Nile has been explored to a little S of the 4th parallel of N lat.; between that parallel and the parallel of Kilimandjaro, or 4° 30' S, the map of Eastern Africa is nearly a blank. Here we find a ridge of gneiss rocks stretching across the bed of the river and forming rapids. The Bari Negroes informed Werne that the river proceeds from the country Ajan, 30 days' journey to the S; and Baron von Muller was informed by a man who "had never seen either snow or ice," that the Bahr-el-Abiad comes from a high mountain, the top of which is quite white. We have seen that 'the mountains of the Moon,' in the position in which most maps of Africa have hitherto placed them, have really no existence; and Dr. Beke thinks it probable that the S limits of the basin of the N. will be found to be formed on the E by the basin of the river Lufdji flowing into the Indian ocean, and on the W by that of the Upper Congo flowing towards the Atlantic. Or it may be that the hydrographical system of the great lake of Eastern Africa, called N'yassi, forms the boundary in the former direction. The extent to the westwards of the basin of the N. is unknown; but it is manifest that it cannot possibly reach much, if anything, beyond 20° E long., where it must be limited by the hydrographical system of Lake Chad. Descending the main stream of the N. in a NNE direction, we come, in 9° 20' N lat., to its great western arm, called Bahr-el-Ghazal or Bahr-el-Keilah, which is described by M. Lafargue, who entered its mouth, as "a magnificent stream, with a tolerably rapid current," and which, Baron von Muller says, contains crocodiles, hippopotami, water-snakes, and fish. M. Werne learned from the natives that this river comes from Barbary! This, Dr. Beke remarks, is physically impossible; for Denham and Clapperton crossed the continent of Africa, from the Mediterranean to Lake Chad, in about the 15th meridian of E long., and must have come to this river had it existed there. Most probably the interpreters of the Egyptian expedition made use of the Arabic expression *Bilad-el-Gharb*, which means literally, 'the West country,' though it is used by Orientals to denote Barbary; so that all that the natives must be understood as having said is, that this river comes from some country in the W. At the point of confluence with the Bahr-el-Ghazal, the N. forms a small lake, which is surrounded with an immense forest of reeds, and then turns abruptly towards the E, to a point where, in N lat. 9° 15', on the S frontier of the territory of the Kek Negroes, it receives the Sobat or Bahr-el-Mokada, a slowly-flowing river coming from the E, and probably carrying with it the drainage of the Wallaga and the Galla territories to the SW of Amhara. From the junction of the Sobat to the

11th parallel of N lat., the river has a NNE course, between swampy banks covered with reeds, in the Dinka territory. In about the last-named parallel it turns N, and separates the territory of Dar Fazokl, or the S extremity of Sennaar, on the E, from the Shilluk territory on the W. Near Eleis or El-Ais, it leaves the Shilluk country, and enters Sennaar. In this distance the bed of the river is very wide, and it frequently divides itself into branches, enclosing fertile islands. Baron von Muller is of opinion that this district of country would be found highly fit for colonization, its climate being healthy, and its soil fertile. At Turah or Terah, in N lat. $13^{\circ} 50'$, 110 m. ENE of Lobeid, the N, when it is high inundates the country for a great distance, forming an immense lake, and the mud which it deposits contains a considerable quantity of salt. "The tropical rainy season," says Baron von Muller, "forms an interesting epoch in the physical aspects of Central Africa. Progressing from S to N in May and June, the rains increase in intensity; fearful hurricanes from the S and SE occur, accompanied by dark-red and yellow clouds, and suffocating clouds of dust fill the air. At the end of the rainy season there arises a regular N wind, extending as far as to 10° N lat., from October to January and February; and curiously enough this wind is felt earlier in Sennaar and Kordofan than in Egypt. Before the rains, the immense plains show only a few bushes of the *Azadirachta*, interspersed with decaying stems of the *Rhamnus zizyphus*, *Spina Christi*, *Balanite Egyptiaca*, and *Salvadora Persica*; after the rains, the soil becomes covered with the most luxuriant vegetation." Under the parallel of $14^{\circ} 20'$, or that of the Jebel-Musselet, the river bends towards NNE, and then flows nearly direct N to Khartum, in N lat. $15^{\circ} 41'$, E long. $32^{\circ} 30'$, a town situated at the confluence of the Bahr-el-Abiad or Abai, and Bahr-el-Azrek, and one of the emporiums therefore of Central Africa. Here the elevation of the stream above the level of the Mediterranean is 1,525 ft. See articles KHARTUM, ABAI, and ABIAD (BAHR-EL).

Upper Nile. The confluent stream makes a remarkable bend in its course between Khartum and Abdam or Ambukol, flowing first about 70 m. in a NNE direction to Derira, where it crosses the frontier of Sennaar, and enters the Shendy territory of Nubia. At this point it assumes a NE direction, which it preserves for about 70 m. to Assur, in N lat. 16° nearly, when it turns N, and in $17^{\circ} 45'$ receives on its r. bank its third great head-stream, the Takazze or Bahr-el-Azrek, identified by some geographers with the *Atbara* of Ptolemy. The Takazze is the second river of Abyssinia in point of size, the Abai or Bahr-el-Azrek being the first. It receives the drainage of a large volcanic region in that country, and brings down by its rapid current a considerable portion of volcanic matter into the N., to which circumstance Ruppel conceives the great fertility of the soil deposited by the river of Egypt is chiefly owing. See TAKAZZE. On this point Le Gardiner Wilkinson says: "The component parts of the water of the N., according to the analysis given by Regnault in the *Memoires sur l'Egypte*, are: 11 water, 9 carbon, 6 oxide of iron, 4 silica, 4 carbonate of magnesia, 18 carbonate of lime, 48 alumina; total 100: the quantity of silica and alumina varying according to the places whence the mud is taken, which frequently contains a great admixture of sand near the banks, and a larger proportion of argillaceous matter at a distance from the river. The same quality of soil and alluvial deposit seems to accompany the N. in its course from Abyssinia to the Mediterranean; and though the White river is the principal stream, being much broader, bringing a larger supply of water, and pro-

bably coming from a greater distance than the Blue river, or Abyssinian branch, which rises a little beyond the lake Dembea, still this last claims the merit of possessing the real peculiarities of the N., and of supplying those fertilizing properties which mark its course to the sea. The White river, or western branch, likewise overflows its banks, but no rich mud accompanies its inundation; and though, from the force of its stream, which brings down numbers of large fish and shells at the commencement of its rise, probably from passing through some large lakes, there is evidence of its being supplied by an abundance of heavy rain, we may conclude that the nature of the mountains at its source differs considerably from that of the Abyssinian ranges." From the junction of the great affluent to the isle of Mokrat, under the parallel of $19^{\circ} 25'$ N, the course of the N. continues NNW; but at the latter point it bends suddenly round to SW, and maintains this direction till it reaches Ambukol, where the river is in fact only 155 m. distant from Dereira, although measured along its course it is at least 460 m. It is usual for travellers to leave the course of the river at Ambukol, and continue their journey to Khartum across the intervening country known as the Bahi-uda desert. The course of the river is now NNW; but at Maragha, it assumes a N direction; and a little below this last point, inclines to the E of N, and enters the Dar-el-Mahass in Lower Nubia, where it turns NE. Under the parallel of 22° N, it forms the cataract known as that of Wadi-Halfa. Passing the splendid remains of Ipsambul, and the towns of Derr, and Dandour, it changes its course to nearly direct N, and under the parallel of 34° N forms the last or lowest cataract near Essuan or Assuan, on the S frontier of Egypt. See article ASSUAN.

Lower Nile. The principal features of that portion of the course of the N. which lies within the Egyptian frontier are touched upon in the article EGYPT. From Assuan to Cairo, by the course of the river, the distance is 545 m., and has been performed with great ease by a steamer drawing 2 ft. 6 in. water. Clot Bey estimates the level of the river above the Mediterranean, at Assuan, 563 French ft.; and at Cairo 40 French ft. According to the same authority, the river flows, in this part of its course, at the rate of 2 m. an hour during the dry season, and 3 m. during the floods. The mass of water carried down during the flood is enormous; and if the calculations made by Linant Bey, previous to his great undertaking of raising the waters at the head of the Delta, be correct, the N. would require but 14 hours to fill up the basin of the lake of Geneva, having a surface of 545,000,000 of sq. metres, and an average depth of 80 metres. There is, however, reason to doubt the accuracy of the calculations. The inferior level to which the low water sank in 1798-99 and 1800 was regularly 3 cubits and 10 digits of the scale of the nilometre at Rhoda. During the three years of French occupation, the floods reached 17 cubits and 10 digits, which implied an actual rise of 7.58, 6.85, and 7.96 metres for the 3 years. A rise of 8 metres is considered as boding fine crops; 7 metres makes them indifferent; while a rise of 9 metres is considered injurious to some places. French engineers find that the level of the soil does not rise more than 126 millimetres in a century from the muddy deposits. Sir G. Wilkinson thinks that the soil has increased in 1,700 years but 9 ft. near Elephantine; 7 ft. at Thebes; 3 ft. 10 in. at Heliopolis and Cairo; and very little indeed at Rosetta. This corroborates the idea of Volney that during historic time no great alteration had occurred in either the outline of the coast, the mouths of the

river, or the extent of the delta. The banks of the N. increase in height as you travel S. In January, Professor Chaix found them 10 to 12 ft. above the water, and beyond Thebes even 25 to 30 ft. They are likewise higher than the flat country, which at Siut is even 4 metres below the level of the banks. In Herodotus's time a rise of 15 to 16 cubits was necessary to water the land, which is equal to 7.8, or 9.2 metres, according as we reckon by the royal or the vulgar cubit. As these quantities are still found correct, they furnish us with another proof of the accuracy of the historian, and that but little change has taken place during the 23 centuries which have elapsed since Herodotus conversed with the priests of Egypt upon the rise of the Nile. The height of the banks and the depression of the land in the interior are indicated, Sir J. G. Wilkinson observes, by the form of the dykes, which beginning on a level with the bank, and extending in a horizontal line, stand frequently 12 or 15 ft. above the land near the edge of the Desert; and he is of opinion that the common notion respecting the invasion of the sand is exceedingly exaggerated. The sand encroaches on the land on the Libyan side of Egypt, in those places where valleys open from the desert, but this bears a very small proportion to the whole surface of the country; and it is evident, he adds, from a comparison of the extent of the alluvial deposit, and the partial inroads of the sand, than the beneficial effects of the former far exceed the injury done by the latter, and that there is a greater proportion of land capable of cultivation now than at any previous period. The sections across the Desert to the Red sea present a gradual ascent from the valley of the Nile to the eastward, till you reach the summit of a mountain-plain of some extent, from which all the valleys or torrents running in a W direction empty themselves into the N., and those to the eastward into the Red sea. In those parts where the primitive range joins the secondary mountains, the descent to the sea is generally shorter and more rapid, but the general character is the same; on the Libyan side is a similar ascent, to the summit of the limestone-range which forms the extensive table-land of that part of Africa. The oases are merely depressions in this mountain-plain; and they vary in their depth, the Oasis Parva being of a much higher level than the Great Oasis. From these facts we may infer that the springs in the former are not supplied from that part of the N. lying in the same lat. with it, but from some distant point where the level of the river is more elevated. The water of the N. percolates to the Great Oasis by means of the bed of clay which forms its base, entering at some point a little to the S; and the only difference in the origin of the sources of the southern and northern Oases is, that one is supplied from the river at no very great distance from it, and that the other traverses a more extensive bed of clay before it reaches the more elevated surface of the Oasis Parva.

It appears, however, that a remarkable fall has actually taken place in the level of the N. at some remote period. Dr. Lepsius was the first traveller whose attention was called to this circumstance by the discovery of hieroglyphic inscriptions on the rocks and basement stories of the fortress at Samneh, recording the rise of the river, and the year, month, and day of the king's reigns when the different inundations occurred. These inscriptions are numerous; and the highest noting is nearly 28 ft. above the inundation of 1848, the greatest hitherto known. It is evident, moreover, from the traces of the effect of the stream upon the rocks at the same level, that the N. did actually rise to the height marked by these contemporary records. They are

all written in the reigns of the kings who were contemporary with or immediately followed the Osirians; and are probably the work of some of the priests, with a view to the security of the temple. Sir Gardner Wilkinson is of opinion that the cause of the great fall in the level of the river was undoubtedly the sudden giving way of some rocks which impeded the stream at a point somewhere below Nubia; and that this fact is attested by the remains of high alluvial soil, by deserted channels of the river, and other evidences that the whole valley was once irrigated by its waters to a considerable height above the present inundations. The extensive plains of Ethiopia—now presenting the appearance of a wilderness—owed, he argues with much apparent force, their former fertility and their existence to the great rise anciently of the N. It appears to have been at Silsilis, or Jebel-el-Silsileh, that the rocky barrier which kept up the river to its early level gave way, not all at once, however, there being reason to believe that at least three subsidences took place at intervals. The catastrophe occurred probably at a period anterior to history; yet it is strange, that among the wonders which the priests delighted to relate, no tradition of an event so extraordinary and so important in its consequences should have been preserved. On the subject of the precise period when the ancient barrier of the N. was broken down, it is difficult to arrive at any certainty. Sir Gardner, however, concludes, from calculations set down in this communication, that it occurred between the years 1700 and 1500 B.C., or between 3,550 and 3,555 years ago.

To the separate article on the DELTA of the Nile the reader is referred for full information respecting the features of the river, in this interesting portion of Egypt. To what is there stated we may here add that a railway is now executing, under the direction of English engineers, between Cairo and Alexandria, which is to be carried across the N., by a tubular bridge, at a point where the river is 1,500 ft. wide when at its full height. The rails, however, are to rest on the top of the tube, as its dimensions are too small for the entrance of a locomotive engine. We may also here add the interesting information, that by means of some valuable geological observations made by Mr. Robert Stephenson during his stay in Egypt, while planning this railway line, and also by the rectification of the levels in some leading points on the same authority, Miss Fanny Corboux has been enabled to restore the relative configurations of land and sea, in Lower Egypt, with something approaching to geological certainty, up to the time of Darius Hystaspes, or B.C. 521, and from thence to deduce those of the Mosaic period. Some raised beaches of the age of Darius show that the separation of the Temseh marine basin from the sea was then a very recent event, the Serapeum bank being only just above water; before that change it was a ford at high tide, and dry at low tide. This bank, during the Mosaic period, was, Miss Corboux argues, the only route out of Egypt to the Sinaitic desert; for the long Suez bank, which now divides the great bitter lake from the present head of the gulf, was rather too low under water to be fordable. Its summit, which Mr. Stephenson ascertained to be very near the edge of the lake-basin, where the pass is narrowest, affords, both in its physical features and its geographical position, a site for the passage of the Exodus that fulfils every condition required by the Mosaic narrative. The relative heights of the Serapeum bank, and a very ancient marine raised beach further show that, when this was on a level with the sea, the Arabian gulf really reached to the outer ports of Hierapolis, or 45 m. beyond its present

boundary, and received the waters of the river N. by one of its smallest branches, an offset of the Pelusiac, while all the others emptied themselves into the Mediterranean sea. These extraordinary geographical features Miss Corboux endeavours to show, must have been not yet altogether obliterated in the time of Moses.

NILE, a river of Tasmania, in the co. of Cornwall, which has its source in Ben-Lomond; runs WSW; and falls into the S. Esk between the parishes of Lymington and Deddington.

NILES, a town of Cayuga co., in the state of New York, U. S., 10 m. SE of Auburn. It has a hilly surface, bordered on the E by Skenateles, and on the W by Owaseo lake. Pop. in 1840, 2,234.—Also a township of Berrian co., in the state of Michigan, 182 m. WSW of Detroit. Pop. 1,420. The v. is on St. Joseph's river. It contains about 1,000 inhabitants.

NILGHERRY. See **NEILGHERRY MOUNTAINS**.

NILKANTHA, a town of Hindostan, in Nepal, about 45 m. in a direct line N of Katmandu, and at the base of the lofty peak of Gosain-Schan. It contains several springs, and a temple dedicated to Mahadeva, and is resorted to by great numbers of pilgrims, who repair hither about the end of July. Throughout the rest of the year it is totally deserted.

NILLANDU-ATOLLS, a double group of islands in the Maldivé archipelago, to the N of Collomanduatoll. It is 40 m. in length from N to S, and is divided into a N and a S group, comprising a total number of 48 islands, and about 1,000 inhabitants. The extreme NE island is in N lat. 3° 01' E long. 73° 05'.

NILLUMBIK, a parish of Australia Felix, in the co. of Bourk, bounded on the N by the p. of Morang; on the W by the Yarra-Yarra rivulet; and on the S by the Yarra-Yarra river.

NILOVA-POUSTYN, a cloister of Russia in Europe, in the gov. of Tver, in the N part of the district of Ostachkov, on an island of Lake Seligher. It is of great extent and affluence.

NIL-PIERREUX, a commune of Belgium, in the prov. of Brabant, and dep. of Nil-Saint-Saint-Martin. Pop. 296.

NIL-SAINT-MARTIN, a commune of Belgium, in the prov. of Brabant, and dep. of Nil-Saint-Saint-Martin. Pop. 420.

NIL-SAINT-VINCENT, a commune of Belgium, in the prov. of Brabant, and dep. of Nil-Saint-Saint-Martin. Pop. 169.

NIL-SAINT-VINCENT-SAINT-MARTIN, a commune of Belgium, in the prov. of Brabant, and arrond. of Nivelles. Pop. 1,322.

NILSIA, a town of Russia in Europe, in the gov. and 30 m. NNE of Kuopio, and district of Nedre-Savolax, at the S extremity of Lake Syvari.

NILUFER, **NIFER**, or **ULFER-SHAH**, a river of Turkey in Asia, in Anatolia, in the sanj. of Khodavendkir. It has its source in the E side of Mount Olympus, near the village of Aksu; and flows in a NW and W direction, passing to the N of Brusa, and through the plain between Lake Abullionte and the gulf of Mudawia; and joins the Mihalish or *Rhyndacus*, on the r. bank, a little above its influx into the sea of Marmara.

NILUN, or **NEILUNG**, a village of Tibet, 40 m. SW of Chaprung, on the N side of the Himalaya mountains, at an alt. of 11,127 ft. above sea-level, and on a river of the same name, a little to the NE of its confluence with the Bhagaretti. This river forms one of the highest, if not the highest, of the sources of the Ganges.

NIMA, a district of Japan, in the island of Nifon, and prov. of Ivami.

* **NIMBURG**, or **WICZEMILOW**, a royal town of Austria, in Bohemia, in the circle of Bunzlau, 18 m. SSE of Jung-Bunzlau, and 21 m. SSW of Nen-Bidschow, on the r. bank of the Elbe. Pop. 2,312. It has extensive breweries.

NIMEGUEN, or **NIMWEGEN**, an old but clean and handsome town of Holland, in the prov. of Gelderland, situated on the l. bank of the great branch of the Rhine called the Waal, 9½ m. S of Arnheim. Pop. in 1840, 21,182. It is fortified with walls, ditches, and extensive outworks. Its streets are narrow, and on account of the abrupt elevation from the river, the windows of one range of houses overlook the chimneys of another. The town-house is a fine old building; and several of the churches are likewise entitled to attention, as well as the flying bridge across the Waal, and the opposite village of Lint. A shady promenade, called the Belvidere, commands an extensive view of the course of the river and the surrounding country. The only article of manufacture for which the town is celebrated is its pale beer, which is sent to almost every part of the Netherlands; it has, however, manufactories of Prussian blue, glue, leather, and cloth; it has also copper-works and salt-works. N. was a Roman post under Julius Caesar, and an imperial city under Charlemagne; but is known in history from the treaty concluded here in 1678. It was taken by the French in 1794, after a severe action.

NIMES, or **NISMES**, a town of France, the cap. of the dep. of Gard, on the railway from Beaucaire to Cette, 30 m. NE of Montpellier, in N lat. 43° 0' 36", E long. 4° 20' 46". Pop. in 1789, 48,360; in 1821, 39,068; in 1846, 47,215, of whom 25,000 were Protestants. It stands in a beautiful plain, surrounded with undulating eminences, and fertile in corn, wine, and olives. The interior of the town is confused and irregular, and the houses in general ill built, but a few are respectable, if not handsome. The suburbs, which are nearly as large as the town, have more straight and regular streets, and the whole town is cleaner than most of the southern towns of France. The close built part of the town is surrounded by boulevards, on the site of the mound or earthen wall which formerly enclosed the city. On the Boulevard de l'Esplanade is a hall of justice, built in the Grecian style, and adorned with Tuscan columns. On another is a handsome hospital. N. has no longer an academy of sciences, but it has a royal college or university academy, with a library of 38,000 vols., a society of medicine and agriculture, an academy of the fine arts, and several other literary and scientific institutions. It has also extensive manufactories, particularly in silk stuffs, stockings, ribbons, linen, and leather. It has likewise dyeing and printing works; also an extensive trade in raw and wrought silk, corn, dried fruits, olive oil, and the wines and brandy of the surrounding country. It is the seat of the departmental authorities and courts of justice, as well as the central court of appeal for the departments of Gard, Vaucluse, Lozère, and Ardeche. A central house-of-detention for 12 departments is established here, and generally contains from 1,000 to 1,500 prisoners. It is now the see of a bishop suffragan of Avignon.—N. is a very ancient city. It originally bore the name of *Nemausus*, and it is supposed was built by a colony of Greeks, about the same time as Marseilles. Augustus sent hither a Roman colony, who embellished it greatly, and made it one of the finest cities of its day. It afterwards successively fell under the dominion of the Vandals, the Goths, and the Saracens; and was united to the crown of France in the 8th cent. It is interesting from its ancient monuments, of which, with the exception of Rome, it is said to contain more than any

other city in Europe. The far-famed *Maison Carrée* is a fine ancient edifice, 76 ft. in length, 39 ft. in breadth, and 39 ft. in height. It has 6 columns in front, and 10 on each side, of 27 ft. in height. This edifice stands in the middle of the town, and is almost in as good preservation as when reared in honour of Caius and Lucius Caesar, the grandsons of Augustus. There are also, among other Roman remains here, a beautiful fountain, with the remains of baths, statues, and other antiques; a building commonly called the temple of Diana, but supposed rather to have been a pantheon; a large ancient tower, above 200 ft. in height, situated on an eminence at the N side of the city, and formerly surrounded by a circle of open columns; and above all, the walls of the amphitheatre, an edifice almost as large as the colosseum of Rome, and in a better state of preservation. The grand outline, 412 ft. in length, and 306 ft. in breadth, of the amphitheatre is still entire; its columns, porticos, 35 rows of steps, and most of its ornaments, are in good preservation.—The arrond. of N. comprises an area of 167,998 hect. Pop. in 1841, 134,737. It is subdivided into 9 cantons.

NIMISHILLEN, a township of Stark co., in the state of Ohio, U. S. It has a level surface, watered by a creek of the same name, and is generally fertile. Pop. in 1840, 1,327.

NIMISILLA, a village of Franklin township, Summit co., in the state of Ohio, U. S., 121 m. NE of Columbus. Pop. in 1840, 100.

NIMMEN, a town of Mandshuria, in the prov. of Kirin-Ula, on the l. bank of the Nonni, 42 m. NNE of Tsitsikar.

NIMTSCH, a circle and town of Prussia, in the prov. of Silesia, and reg. of Breslau. The circle comprises an area of 51 sq. m., and 23,036 inhabitants. The town is 32 m. S of Breslau, and 9 m. E of Reichenbach, on the Lobe. Pop. in 1837, 1,654. It is enclosed by walls, and contains 2 Lutheran churches, a Catholic chapel, and an hospital. It has several distilleries, and manufactories of woollen fabrics and of hosiery.

NIMRA, a town of Arabia, in Yemen, 54 m. WNW of Kaukeban, and at an equal distance from Leheia.

NIMRAB, a tribe of Arabs, who inhabit the territory of Shendi in Nabia.

NIMRUD, or **NIPHATES**, a range of mountains in Turkey in Asia, between the pashaliks of Erzerum and Diarbekir. They commence a little to the N of Bedlis, near the source of the Khabur; run W; and unite with the Taurus chain near the source of the Tigris. They extend a total distance of 180 m., and form a line of separation between the upper streams of the Euphrates and Tigris. Their W division bears the name also of the Gudji-dagh.

NIMRUD, an immense quadrangular mound of bricks and rubbish, about 4 m. in circumf., 8 m. SSE of Mosul, and 24 m. SE of Zikru-T-Alwas, as a dyke of solid masonry which crosses the bed of the Tigris is called. In the middle of the W side of this mound is the celebrated NW palace, which Mr. Layard has recently explored with such rich and interesting results. It is one of four similar mounds in this vicinity, one of which, that of Khorsabad, is situated about 14 m. NE of Mosul, on the l. bank of the Khamsar, an affluent of the Tigris. Another, or rather twin mound, called Konyurdik and Nebbi-Yunis, stands immediately opposite Mosul. The third, called Karamies, is as far N of Nimrud as Khorsabad is from Mosul. Mr. Layard is of opinion that the position of the long-lost city of Nineveh may be assumed by taking these four great mounds as the corners of its ground plan; the four sides corresponding pretty accurately in circuit with the 480 stadia = 60 m., or perhaps 74 m. assigned by Diodorus Siculus as the circuit of the walls, and the three days' journey of the prophet Jonah. It appears, from some incidental expressions of Herodotus, that he intended to give a description of this famous metropolis in the work he proposed on Assyrian history; but either that work never was composed, or it has perished. He says that Nineveh, or, as he calls it, *Nine*, was ruined by Cyaxares and the Medes, using language which implies that in his time it was either not at all or but partially inhabited. Diodorus describes it as cover-

ing an area of 480 stadia, and surrounded with walls 100 ft. high. He speaks, in another place, of its capture by Arbaces, a Mede. Its final conquest by Cyaxares and Nebopolassar, in 612 B.C., is described by Alexander Polyhistor; after which time, it not only was superseded as the seat of government by Babylon, but the materials of its buildings, and probably its pop. also, were transferred to the rival city. Nearchus, in the time of Alexander, mentions Nineveh in terms which seem to imply that a city of the name was still in existence, though it had lost its power and greatness. Strabo says that it was destroyed before his time; and Lucian, that when he wrote (A.D. 180.) not a vestige of it remained. In this state—"a desolation," in the language applied to it by the prophet Zephaniah—this great city seems to have continued until Botta's and Layard's researches and discoveries drew attention to it again. The notice of travellers in Assyria had indeed been often attracted to the huge mounds of earth and rubbish, which it was conjectured might be the remains of the once stupendous cities of Nineveh and Babylon. A mass of brickwork, vitrified, and rising out of the aggregated debris of centuries, was long identified with the remains of the tower of Babel. Some mounds, it was also conjectured, might mark the site of the hanging-gardens of Babel (see that article). And among the numerous mounds on the l. bank of the Tigris, opposite the modern city of Mosul, one which tradition fixed on as the tomb of Jonah, led conjecture to the probable site of the ancient Nineveh. As early as 1841, Mr. Layard had inspected the ruins and mounds on the E bank of the Tigris, and the scene and sensation which it then excited in him, are thus described in his own words: "He [the spectator] has left the land where Nature is still lovely,—where, in his mind's eye, he can rebuild the temple, or the theatre, half doubting whether they would have made a more grateful impression upon his senses than the ruin before him. He is now at a loss to give any form to the rude heaps upon which he is gazing. Those of whose works they are the remains, unlike the Roman and the Greek, have left no visible traces of their civilization or of their art; their influence has long since passed away. The more he conjectures the more vague the results appear. The scene around is worthy of the ruin he is contemplating; desolation meets desolation; a feeling of awe succeeds to wonder; for there is nothing to relieve the mind, to lead to hope, or to tell of what has gone by. These huge mounds of Assyria made a deeper impression upon me, gave rise to more serious thoughts and earnest reflections, than the temple of Balbec and the theatres of Ionia." Shortly afterwards, Mr. Layard had a second opportunity of viewing the ruins of Nimrud, and of examining them; and it was upon this occasion that the thought suggested itself to him of making excavations. In a happy moment, he obtained a letter of introduction to Sir Stratford Canning, her Majesty's ambassador at the Sublime Porte. That distinguished statesman at once perceived that no ordinary person had been presented to his notice, and invited him to prolong his stay in the East, and discharge some extra duties of the embassy and ultimately enabled the sanguine and successful explorer, in the autumn of 1845, to resume his excavations in Assyria, in the hope that, should success attend the attempt, means would be found to carry it out on an adequate scale. All our readers know the triumphant result of Mr. Layard's enterprise and perseverance, which have brought into the possession of this country treasures beyond all price, in the monuments now deposited in the Assyrian gallery of the British museum.

Mr. Layard's general conclusions from his Assyrian researches, aided by the extraordinary skill of Major Rawlinson in deciphering various inscriptions, are thus summed up by himself. "1st. That there are buildings in Assyria which so far differ in their sculptures, in their mythological and sacred symbols, and in the character and language of their inscriptions, as to lead to the inference that there were at least two distinct periods of Assyrian history. We may, moreover, conclude, that either the people inhabiting the country at those distinct periods were of different races, or of different branches of the same race; or that by intermixture with foreigners, perhaps Egyptians, great changes had taken place in their language, religion, and customs, between the building of the first palace of Nimrud, and that of the edifices at Khorsabad and Konyurdik. 2d. That the names of the kings on the monuments show a lapse even of some centuries between the foundation of the most ancient and most recent of these edifices. 3d. That from the symbols introduced into the sculptures of the second Assyrian period, and from the Egyptian character of the small objects found in the earth, above the ruins of the buildings of the oldest period, there was a close connection with Egypt, either by conquest or friendly intercourse, between the time of the erection of the earliest and latest palaces; and that the monuments of Egypt, the names of kings in certain Egyptian dynasties, the ivories from Nimrud, the introduction of several Assyrian divinities into the Egyptian pantheon, and other evidence, point to the 14th cent. as the probable time of the commencement, and the 9th as the period of the termination of that intercourse. 4th. That the earlier palaces of Nimrud were already in ruins, and buried before the foundation of the later; and that it is probable they may have been thus destroyed about the time of the 14th Egyptian dynasty. 5th. That the existence of two distinct dynasties in Assyria, and the foundation, about 2,000 B.C., of an Assyrian monarchy, may be inferred from the testimony of the most ancient authors; and is in accordance with the evidence of Scripture, and of Egyptian monuments. The ruins hitherto examined," Mr. Layard pro-

ceeds to say, "have shown that there are remains of buildings of various epochs on the banks of the Tigris, near its junction with the Zab; and that many years, or even centuries, must have elapsed between the construction of the earliest and the latest. That the ruins at Nimrud were within the precincts of Nineveh, if they do not alone mark its site, appears to be proved by Strabo, and by Ptolemy's statement that the city was on the Lycus, corroborated by the tradition preserved by the earliest Arab geographers. Yakut and others mention the ruins of Athur, near Selamiyah, which gave the name of Assyria to the prov.; and Ibn Sald expressly states that they were those of the city of the Assyrian kings who destroyed Jerusalem. They are still called, as it has been shown, both Athur and Nimrud. The evidence afforded by the examination of all the known ruins of Assyria further identifies Nimrud with Nineveh. It would appear from existing monuments that the city was originally founded on the site now occupied by these mounds. From its immediate vicinity to the place of junction of two large rivers, the Tigris and the Zab, no better position could have been chosen. It is probable that the great edifice in the NW corner of the principal mound was the temple or palace, or the two combined; the smaller houses were scattered around it, over the face of the country. To the palace was attached a park, or paradise as it was called, in which was preserved game of various kinds for the diversion of the king. This enclosure, formed by walls and towers, may perhaps still be traced in the line of low mounds branching out from the principal ruin. Future monarchs added to the first building, and the centre palace arose by its side. As the population increased with the duration and prosperity of the empire, and by the forced immigration of conquered nations, the dimensions of the city increased also. A king founding a new dynasty, or anxious to perpetuate his fame by the erection of a new building, may have chosen a distant site. The city, gradually spreading, may at length have embraced such additional palaces. This appears to have been the case with Nineveh. Nimrud represents the original site of the city. To the first palace the son of its founder added a second, of which we have the ruins in the centre of the mound. He also built the edifice now covered by the great mound of Baasheikha; as the inscriptions on the bricks from that place prove. He founded at the same time a new city at Kalah-Sherghat. A subsequent monarch again added to the palaces at Nimrud, and recorded the event on the pavement-slabs in the upper chambers of the western face of the mound. At a much later period, when the older palaces were already in ruins, edifices were erected on the sites now marked by the mounds of Khorsabad and Karamles. The son of their founder built the great palace at Konyunjik, which must have exceeded those of his predecessors in extent and magnificence. His son was engaged in raising one more edifice at Nimrud—the previous palaces, as it has been shown, having been long before deserted or destroyed,—when some great event, perhaps the fall of the empire and destruction of the capital, prevented its completion. The city had now attained the dimensions assigned to it by the book of Jonah, and by Diodorus Siculus. If we take the four great mounds of Nimrud, Konyunjik, Khorsabad, and Karamles, as the corners of a square, it will be found that its four sides correspond pretty accurately with the 480 stadia or 60 m. of the geographer, which make the three days' journey of the prophet. Within this space there are many large mounds, including the principal ruins in Assyria, such as Karakush, Baasheikha, Baazani, Hussein, Tel-Yara, &c. &c.; and the face of the country is strewn with the remains of pottery, bricks, and other fragments. The space between the great public offices was probably occupied by private houses, standing in the midst of gardens, and built at distances from one another; or forming streets which enclosed gardens of considerable extent, and even arable land. The absence of the remains of such buildings may easily be accounted for. They were constructed almost entirely of sun-dried bricks, and, like the houses now built in the country, soon disappeared altogether when once abandoned and allowed to fall into decay. The largest palaces would probably have remained undiscovered had there not been the slabs of alabaster to show the walls. There is, however, sufficient to indicate that buildings were once spread over the space above described; for, besides the vast number of small mounds everywhere visible, scarcely a husbandman drives his plough over the soil without exposing the vestiges of former habitations. Each quarter of the city may have had its distinct name; hence the palace of Eborita, where Sardanapalus destroyed himself, and the Mespila and Larissa of Xenophon, applied respectively to the ruins at Konyunjik and Nimrud. Existing ruins thus show that Nineveh acquired its greatest extent in the time of the kings of the second dynasty—that is to say, of the kings mentioned in Scripture. It was then that Jonah visited it, and that reports of its size and magnificence were carried to the west, and gave rise to the traditions from which the Greek authors mainly derived the information handed down to us."

Mr. Ainsworth, the able and efficient secretary of the Syro-Egyptian society, and whose personal researches led the way to a better knowledge of the geography of Assyria, has called in question some of the conclusions at which Mr. Layard has arrived in the above passage. In a paper recently read by him before the Syro-Egyptian society, after pointing out the received distinctions of Assyria Proper, and of the Assyrian empire, Mr. Ainsworth proceeded to argue that, whichever of the disputed versions of Gen. x. 11 is adopted, it still remains certain that there was an Assur or Athur existing before the foundation of Nineveh;

that the Arabian geographers, Yakut, Abulfeda, and Ibn Sald, describe the ruins at the modern N. as those of the said Assur, or Athur; that Mr. Rich, in his *Kurdistan* [vol. ii. p. 129], the Rev. N. Morren, in his article 'Assyria' in *Kitt's Cyclopaedia*, and Dr. Layard, in his *Nineveh*, &c. [vol. ii. p. 245], admit that all well-informed natives designate Nimrud as Al Asshur, or Athur. He also argued that the name which occurs in the inscriptions found in the NW edifice at Nimrud has been read by Major Rawlinson as that of the Assur of Genesis, and that Dr. Hincks has also published his conviction that the first word of the inscription is either the name, or an abbreviation of the name, of Athur; although the doctor adds, which is a *non sequitur*, that the same name stands for the city of which the historical name is Nineveh; that Dr. Layard's archaeological investigations have already shown that the builder of the central palace—the second in succession of time—at Nimrud also erected edifices, if he did not found the sites of what are now called Baasheikha and Kalah Sherghat; that Dr. Layard also admits that the more modern Assyrian ruins at Konyunjik, Khorsabad, and Karamles represent the Nineveh of the Books of Jonah and Nahum; of profane history and of travellers. But Dr. Layard also comprises within the same denomination a palace of the same age that was erected upon the ruins of Asshur. That taking Dr. Layard's own map, and laying down upon it, as proposed by that gentleman, the extent given to Nineveh by Diodorus Siculus, taking the value of the stadium as proposed by Dr. Layard, or, as Mr. Ainsworth would prefer, as proposed by Major Jervis, 607-62977 ft., the great mound of Nimrud, Konyunjik, Karamles, Baasheikha, Khorsabad, &c., cannot be brought into that area. That the distance of Nimrud from Mosul is, according to Yakut, 8 farsakhs—of Larissa (Nimrud) to Mespila (Mosul), according to Xenophon, 6 parasangs—of Nimrud from Yaranjah 18 m., according to Mr. Ainsworth's own researches—and from Nimrud to Konyunjik, in Dr. Layard's map, 28 geog. m.; whereas the long side of the square, as described by Diodorus Siculus, gives only 168 m. So also from Nimrud to Karamles is a distance of 16 geog. m.; whereas, according to the measurements of Diodorus Siculus, the shorter side should not exceed 9 or 10 m. No arbitrary grouping of the Assyrian ruins would be satisfactory. Mr. Ainsworth contended, at the present moment. In any case, as many sites, as Jerraiyah, Tel Escoff, Tel Kalif, Bazarani, Hussein, Tel Yakub, Keshaf, Tel Shir, Hamman Ali, &c., must be left out as could be got into a Nineveh so laid down; but that if such a grouping were made, Baasheikha, Bazarani, Karamles, and Nunyah would come together with far greater topographical aptitude than the group proposed by Dr. Layard, and which would exclude Baasheikha, monumentally established as the site of the palace of the successor of the builder of the NW palace of Nimrud; that such a grouping would also best meet the descriptions of the site of the historical Nineveh left to us by Herodotus, Pliny, and others. That if when Strabo said "between the rivers," he had had Nimrud in his mind, he would, with his customary accuracy, have said "at the junction of the rivers";—and that, finally, in the present state of the inquiry there are no other data than that Nimrod or Ninus, or his or their successors, erected and continued to erect edifices at Athur, one of the oldest cities of Assyria Proper, and that the second dynasty also erected edifices at the same spot after its fall, and the rise of the historical Nineveh, to identify the one with the other; but that the greater number of probabilities, at least topographically speaking, are that the two sites were always distinct, and that Athur or Nimrud was a separate site from the abode of Ninus, as well as from the historical Nineveh.

The points above debated are certainly involved in considerable doubt and difficulty, and it will require much more extensive research in the way of excavation, and the labour perhaps of a generation or two of historians and philologists to elicit well-established and satisfactory conclusions from the new found evidence. Mr. Fletcher's opinion as to the identity of the ruins of Nimrud with certain ancient localities may be here given: "It is evident," he says, "from the sculptures which have been discovered at Nimrud, that these mounds were in ancient days occupied by some large Assyrian city. Major Rawlinson, in his interesting paper on Assyrian Antiquities, assumes that the ruins of Nimrud represent the old city of Calah, or Halah, while he places Nineveh at Nebbi-Yunus. Yet it appears likely that the ancient Calah, or Halah, which was probably the capital of the district of Calachene, must have been nearer to the Kurdish mountains. Ptolemy mentions the prov. of Calachene as bounded on the N by the mountains of Armenia, and on the S by the district of Adiabene. Most writers place Ninus, or Nineveh, within the latter prov. But if so, Adiabene would include also Nimrud, and, therefore, it is not probable that Halah, or Calah, could have occupied the site indicated by Major Rawlinson. St. Ephraim, himself a learned Syrian, and well acquainted with the history and geography of the East, considers Calah to be the modern Hatareh, a large town inhabited chiefly by Yezidees, and situated NNW of Nineveh. Between Hatareh and the site of Nineveh we find a village bearing the name of Ras-el-Ain, which is evidently a corrupted form of the Resen of Genesis. It is worthy of remark that this theory confirms the statement made in Gen. x. 12, where Resen is represented as occupying a midway position between Calah and Nineveh. But assuming Major Rawlinson's hypothesis to be correct, it is clear that there would be no room for a large city between Nebbi-Yunus and Nimrud, a distance of, at most, 25 m. Nor is it certain that the latter may be considered as the site of the *Larissa* of Xenophon. A considerable interval must have taken place between the passage of the

river Zab by the Ten thousand and their arrival at the Tigris. It is expressly mentioned that they forced a mountain-stream, which seems to have been of some width, soon after they had passed over the Zab. But no vestige of any stream of this kind appears between Nimrud and the Tigris. It is probable, therefore, that the Charradra of Xenophon was the Hazir, or Bumadas, after passing which, the Ten thousand marched in a NW direction past the modern village of Kermalis to the Tigris. At a short distance from the latter they encountered a ruined city, which Xenophon terms Larissa, and which occupied probably the site of the modern Ras-el-Ain. The village known by this name is about 12 m. from the Tigris, but the ancient city may have been much nearer. Both Ptolemy and Ammianus Marcellinus mention a city situated at the mouth of the Zab, on precisely the same site as that occupied by the mounds of Nimrud, which they term Birtha, or Virtha. But Birtha, or Britha, in Chaldee, signifies the same as Rehoboth in Hebrew, namely, wide squares or streets, an identity in name which seems to imply also an identity in locality. It appears likely, therefore, that Nimrud is the same as Rehoboth [Gen. x. 11.], which it is said Asshur founded after his departure from the land of Shinar."

NIMWEGEN. See NIMEGUEM.

NIMY-MAISE'ES, a department and commune of Belgium, in the prov. of Brabant, and arrond. of Mons, watered by the Haine. Pop. of dep. 2,048. The village is 2 m. N of Mons; on the l. bank of the Haine. Pop. 1,496. It has manufactories of porcelain and pipes, and of sugar from beet-root.

NINANE, a commune of Belgium, in the prov. of Limburg and dep. of Chaudfontaine. Pop. 387.

NINEANAI, or **NIMEANAI**, a large state in the interior of Africa, to the W of the Zanguebar coast, intersected by the equator. Nothing is known of it save from the reports of Somali traders; who represent it as a fertile region, under a sovereign chief.

NINEHEAD, a parish of Somersetshire, $1\frac{1}{2}$ m. N of Wellington. Area 1,448 acres. Pop. in 1831, 311; in 1851, 357.

NINE ISLANDS, a group of small islands in the Pacific, lying to the N of the Salomon archipelago, in S lat. $4^{\circ} 36'$, E long. $154^{\circ} 58'$.

NINE MILE PRAIRIE, a township of co. Callaway, in the state of Missouri, U. S. Pop. 2,059.

NINEROLA, a village of Spain, in the prov. and 6 m. from Valentia, celebrated for quarries of fine marble.

NINE STANDARDS, a mountain of Westmoreland, 3 m. ESE of Kirkby-Stephen, in N lat. $54^{\circ} 27' 2''$, having an alt. of 2,136 ft. above sea-level.

NINEVEH. See NIMRUD.

NINFA (SANTA), a village of Sicily, in the prov. and 30 m. SE of Trapani.

NINFIELD, a parish of Sussex, $3\frac{1}{2}$ m. SW of Battle. Area 2,554 acres. Pop. in 1851, 570.

NING, a town and district of China, in the prov. of Shen-si, 90 m. NNW of Si'an.—Also a town and district in the prov. of Kiang-si, 90 m. WNW of Nanchang.—Also a town and district in the prov. of Yun-nan, 60 m. S of Yun-nan.

NING-GOUTA, a town of Mandshuria, on the Hurka river, 90 m. ENE of Kirin, in N lat. $44^{\circ} 24'$, E long. $129^{\circ} 43'$. It is surrounded by a double line of strong palisades, with 4 gates. It conducts an active trade with the Chinese frontier.

NING-HAI, a town of Corea, in the prov. of Kin-shan, on the Yellow sea, 120 m. SE of Hangyang.

NING-HIA, or **NING-HAI**, a town of China, in the prov. of Kan-su, near the great wall and on the l. bank of the Hoang-ho, in N lat. $38^{\circ} 32'$. It is reputed to be 6 m. in circuit, and to have two walled suburbs; but its houses are mostly built of wood and earth. Its brick walls are ancient, and almost entirely covered with moss and lichens, but are well-preserved. The streets are dirty, narrow and winding; and many quarters are in ruins. This town was the capital of a flourishing Tartar state for two centuries. It is surrounded on all sides by marshes, in which canes, reeds, and water-lilies, grow in abundance.

NING-HIANG, a town of China, in the prov. of Shan-si, 90 m. SW of Tai-Yuan.

NING-KOUE, a town of China, in the prov. of Ngan-hwei, in N lat. $31^{\circ} 2'$, E long. $118^{\circ} 43'$. It is environed by a mountainous and thickly wooded territory. It is celebrated for its manufacture of paper from a species of rose.

NINGO, a town of Upper Guinea, on the Gold coast, 30 m. W of the embouchure of the Volta. The environs are flat, fertile, and wooded.

NING-PO, a city of China, in the prov. of Chekiang, on a tongue of land at the point of junction of two rivers, which, uniting below this town, form the Takia or Ning-Po river, in N lat. $29^{\circ} 54'$, E long. $121^{\circ} 32'$, about 100 m. S of Shang-hai, and nearly opposite the island of Chusan. It is situated on a fertile plain surrounded by hills, and well-irrigated from the river. Its walls, 25 ft. in height, have a circuit of 6 m., and it is well-supplied with shops, but presents no important edifice, except its temples, one of which is of large size. Its streets are narrow, and are crossed here and there by heavy stone arches. Its pop. has been estimated at between 200,000 and 300,000. Of the pop. within the walls, it has been estimated that four-fifths are engaged in trade, merchandise, or labour; while no less a proportion than the remaining fifth is calculated to belong to the literary class. This, however, includes not only the graduates and candidates for literary promotion, but also the writers and clerks in the public offices. Of the pop. in the suburbs, and on the level plain extending to the hills, six parts out of ten are estimated as deriving their livelihood from agriculture; three parts as artisans of various kinds; and the remaining tenth as consisting of fishermen and boatmen. The manufacture of carpets and mats furnishes employment to a large proportion of the people. The female part of the pop. are employed, to a considerable extent, in weaving cloth. If the statement which was once made by the present *taoutai* be correct, that in N. there are 100,000 houses and shops assessed in taxes to the government, even a moderate calculation must raise the number of the pop. to nearly 400,000 persons. This, however, will be considered a very large estimate, when the extent of ground actually covered with buildings is considered. In some parts of the city a considerable space of ground is occupied by gardens and tombs. The latter are often covered with shrubs, and various species of the melon tribe. There is an usually large proportion of temples and of spacious private buildings within the walls. The breadth, also, and cleanliness of the principal streets, give a favourable impression of the wealth and rank of the inhabitants. The comparative facility, however, with which houses can be rented within the city by foreigners, the decay of many of the buildings, and the non-occupation of others, furnish a proof that the city is rapidly losing its former splendour and consequence. But N. is still a place of importance, and has a considerable trade with the interior. It has a large maritime trade also with the prov. of Fo-kien, and the island of Formosa, from both of which sugar and rice are imported. There is also an extensive trade with the prov. of Shan-tung. It is one of the 5 ports opened by recent treaty to foreign trade, but its commerce has as yet proved limited, although it is near to the green tea districts. It exports silks to Japan, and wood and charcoal to Shang-hai; and a considerable number of the pop. find employment in junk building. A missionary hospital and station was founded here in 1843, and promises to be of peculiar value in the evangelization of China. The peculiar advantages which N. presents as a missionary station are thus enumerated: 1. The pop.,

from the limited extent of its foreign commerce, is less exposed to the disquieting, contaminating influences on their simplicity. 2. The literary character and social refinement of the people have acquired a celebrity throughout the empire. 3. N. is the usual point of access to the populous city of Hang-chow, which is the cap. of the prov. of Che-keang, and is inferior in importance only to Su-chow. 4. It has also an extensive native trade with the interior. 5. Its situation on the mainland, opposite to Chusan, invests it with an important character, under a variety of future contingencies. In the event of a recurrence of hostilities, Chusan would probably, as in the last war, be immediately occupied by British troops; and, once re-occupied, it would be permanently retained, and probably substituted for Hong Kong, as the base of British power. This would open Chusan to missionary efforts; and missionaries from N., speaking the same dialect, would be ready at once to enter on this fertile, salubrious, and populous island. The climate, like that of Shang-hai, is favourable for Europeans of ordinary physical strength; the boundary regulations permit a considerable extent of missionary exertion; the people are friendly and respectful to foreigners; the rulers evince no disposition to oppose the efforts of missionaries; and the dialects of Shang-hai and N., though dissimilar, resemble each other more than at any other two of the consular cities of China." One of the branches of the river of N. leads in a NE direction to Yu-yow and Hang-chu-fu; the other, or SW branch, leads to Fung-wai. A bridge of boats connects the town with its suburbs. In the year 1841, a body of British troops held winter-quarters here. The weather set in intensely cold in the middle of December, and on the 14th of that month the surrounding hills were all covered with snow, which also fell heavily in the town itself.

NING-THI. See **KYAN-DUAYN**.

NING-TU, a town of China, in the prov. of Kiang-si, in N lat. 26° 27', E long. 115° 49'.

NING-YUEN, a town of Eastern Tartary, near the frontier of China, situated on a small river of the same name which falls into the gulf of Leao-tung, 250 m. E of Pekin.—Also a town of China, in the prov. of Ho-nan, in N lat. 25° 32', E long. 111° 46'.

NINIAN BAY, a bight on the NE coast of Australia, to the W of Point Barrow, running into the land about 3 m.

NINIANS (SAINT), a parish and town of Stirling-shire. The greater part of the p. is arable land, and well-cultivated. Pop. in 1851, 9,851.—The town, 2 m. S of Stirling, is a considerable manufacturing place. Tartans, woollen stuffs, and nails are extensively made here, and at the village of Bannockburn. In 1746, the church, converted into a magazine by the Highland army, was blown up. The main street is narrow and confined, and the houses are in general old-fashioned.

NINK, a town of Russia, in the gov. of Archangel, in about 64° 30' N lat., and 31° E long.

NINOVE, a town of Belgium, in the prov. of E. Flanders, on the Dender, 16 m. SW of Brussels, and 22 m. SSE of Ghent. Pop. in 1842, 4,500. Linen yarn is made here.

NINTH ISLAND, a small island off the S coast of Van Diemen's Land, in S lat. 40° 51', E long. 147° 15'.

NINTRE, a village of France, in the dep. of Vienne, cant. and 5 m. S of Chatellerault. Pop. 1,500.

NIO, anciently *Ios*, a small island of European Turkey, in the archipelago, 17 m. SW of Naxos, and 4 m. E of Sikyno, 8 m. in length from SE to NW, and 3½ m. in breadth. It is hilly, and not particularly fertile, but has a pop. of 3,700 Greeks, who

raise both wine and cotton; they export also oil, wax, cheese, and honey; their principal property, however, consists in their cattle, which are numerous. Nio, the chief town, is built on a height on the W side of the island, and is said to contain three-fourths of the inhabitants. Tradition asserts that Homer died in this island, and had erected to him a monument here. Gaultier fixes the position of the highest and central point of the island in N lat. 36° 42' 44", E long. 25° 20' 59".

NICEUIL-SUR-L'AUTISE, a village of France, in the dep. of La-Vendee, cant. of Saint-Hilaire-sur-l'Autise. Pop. 800.

NIONS. See **NYONS**.

NIORT, an arrondissement, canton, and town of France, in the dep. of Deux-Sevres.—The arrond. comprises 8 cant., and has an area of 143,501 hect. Pop. in 1841, 102,482.—The cant. comprises 13 com. Pop. in 1841, 30,758.—The town, situated on the Sevre, which from it takes the name of Sevre-Niortaise, in N lat. 46° 19', had a pop. of 18,739 in 1841. It stands on two small hills, and has a castle flanked with four round towers. It has a public library of 20,000 vols., a communal college, a school-of-design, and a botanic garden. Its manufactures consist of woollen-stuffs, gloves, leather, shoes, and paper.—Also a town of France, dep. of the Mayenne, 2 m. W of Lassay. Pop. 2,000.

NIO-TCHU, a river of Tibet, which joins the Pung-suk-Zangro, on the r. bank, on the frontier of Bhotan.

NIPASK, a lake of North America, in N lat. 52° 10', W long. 103° 20'.

NIPHON. See **NIFON**.

NIPIGON, a river and lake of Upper Canada. The lake is about 60 m. N of Lake Superior, and discharges itself into the latter lake by the river, which has a course from NNW to SSE.

NIPISIGHT, a river and village of New Brunswick. The river has a NE course, and enters the S side of Chaleur bay, above 12 leagues W of Caraquit island, after a course of 45 m. The v. is at its mouth.

NIPISSING, a lake of Upper Canada, to the NW of Lake Huron, into which it discharges itself by the river Francais. It is also connected with the Ottawa by the SW branch. It is noted for its immense flocks of wild geese. It is about 50 m. in length, by 35 m. in breadth.

NIRGUA, a town of Venezuela, 36 m. W of Valencia, originally erected in the vicinity of the mines of Villa-Rica, but afterwards removed in consequence of the repeated attacks of the Indians. Its environs are fertile, but infected by malaria. The Sambos of N., for services rendered to the royal authority, attained from the Spanish monarch the title of "his faithful and loyal subjects, the Sambos of the city of Nirgua." The houses are almost all in ruins from age.

NIRIS, a village of Farsistan, in Persia, 75 m. E of Shiraz. It has manufactories of arms and cutlery.

NIRMUL, a town of Hindostan, in the prov. of Berar, and district of Nandere, belonging to the Nizam, 4 m. N of the Godavery.

NIRVA, a village of Nifon, in Japan, 80 m. ENE of Meaco.

NISAO, a river of Hayti, which rises in a small lake, and flows SSE, having its embouchure in about N lat. 18° 14', W long. 70° 12'.

NISCH. See **NISSA**.

NISEMASSE, a cluster of small islands in the Eastern seas, in N lat. 8° 15', E long. 128° 42'.

NISHAPUR, an ancient city of Persia, 35 m. WSW of Meshid, once the greatest and richest in

the prov. of Khorassan. About the middle of the 12th cent. it was taken by the Tartars, and so completely ruined that when the inhabitants returned they could not distinguish the situation of their own houses. Its ruins are said to cover a circuit of 25 m. The present pop. is about 8,000. Delicious fruits are produced in its neighbourhood; and it has a trade in turquoises, iron, and salt.

NISHNABATTONA, a river of Louisiana, which falls into the Missouri, on the l. bank, in N. lat. 40° 20'. It is about 50 yds. wide at its mouth, and runs parallel to the Missouri throughout the greater part of its course.

NISI, a town of Greece, in the SW of the Morea, on the r. bank of the Pidheima, near its mouth. It is supposed to occupy the place of the ancient *Stenicharos*, a port of the Messenians. The vicinity is rich and well-cultivated.—Also a river of Sicily, in the district of Messina, which flows into the Ionian sea after a SE course of 12 m. Its sands are said to yield gold.

NISIBIN, a village of Asiatic Turkey, in the pash. of Bagdad, 36 m. SE of Mardin, now of petty dimensions, but distinguished as occupying the site of the ancient fortress of *Nisibis*, long regarded by the Romans as the firmest bulwark of the Eastern empire. The foundation of the walls, about 3 m. in circuit, and several detached towers, may still be seen overlooking the small but rapid river *Mygdonius*, and approached by a small Roman bridge of 12 arches. The greater part of the site of the ancient city is now covered with the black tents of the Kurds. Rice is cultivated in the environs.

NISIDA, or **NISITA**, a small island of the Mediterranean, in the gulf of Naples, 3 m. SE of Pozzuoli. Its lower part is covered with gardens and other cultivated ground, while the upper is crowned as anciently with wood. It is described by Lucan as emitting pestilential steams; but at present it is perfectly salubrious. It has a small sea-port called Porto-Pavone, where ships going to Naples perform quarantine. See article **NAPLES** (GULF OF).

NISKAYUNA, a township of Schenectady co., in the state of New York, U. S., on the S side of the Mohawk, 12 m. NW of Albany. Pop. 700.—Also a settlement of Shakers, 8 m. NW of Albany.

NISMES. See **NIMES**.

NISSA, a fine city of Bulgaria, the *Naissus* of antiquity, and one of the oldest towns in European Turkey, seated on the l. bank of the rapid Nischava, a tributary of the Morava, which divides the town from the dilapidated *grad* or fortress. It is encircled by an earthen embankment with palisades and gates; and its fortress is surrounded by a strong rampart of masonry, with elevated bastions. The pop. is about 4,000. Mr. Spencer is of opinion that a good carriage-road might be constructed from the valley of N. by following the course of the Morava to Pristina, and from thence taking the valley of the Vardar, through Macedonia, to Salonica on the *Ægean* sea. Dr. Platé is of opinion that, in the event of the prolongation of the German and Hungarian railways across Turkey, as a means of speedy communication with the East, the line should run along the r. bank of the Morava; and then, leaving the valley, go over low upland either toward N. or Sophia, whence it would be pushed forward to Adrianople and Constantinople, or into the valley of the Egerb-su, and thence into that of the Vardar near Uskub.

NISSAH, a river of Algeria, which descends from the Gurgurah, and after receiving the Bugdurah, assumes the name of the Buberak, and flows into the Mediterranean, 42 m. E of Algiers.

NISSAN, a village of France, in the dep. of Hérault, 4 m. SW of Beziers. Pop. 1,200.

NISSAVA, a river of European Turkey, which descends from Mount Jeseckowitz to the S of Sin-shink; flows WNW, passing Nisse; and, 12 m. below the latter town, joins the Morava, on the r. bank, after a course of 90 m.

NISSER-VAND, a lake of Norway, in the bail. of Bradsberg. It is about 30 m. in length, and from 2 to 3 m. in breadth; and is enclosed by cliffs of vast elevation, or mountains clothed with sombre pine-forests. It discharges its waters by the Nid-elv into the Skager-rack.

NISSUM-FIORD, an inlet on the W coast of Jutland, communicating with the sea by a narrow passage called the Sønder-minde, in N. lat. 56° 22'. It is 13 m. in length, by 4 m. in breadth.

NISTELRODE, a village of Holland, in the prov. of N. Brabant, 12 m. E of Bois-le-Duc. Pop. 1,600.

NISTER, a village of the duchy of Nassau, in the bail. of Hachenburg, on an affluent of the Sieg. Pop. 2,136.

NI-TAO, an island of the Yellow-sea, near the SW extremity of Corea. It is 12 m. in length from N to S.

NITH, the largest of the three chief rivers of Dumfries-shire, giving name to the W division of the co. Its principal head-streams rise on the N side respectively of Prickeny and Benbain-hills, 2½ m. asunder, both on the boundary of Ayrshire. After passing the village of New-Cumnock, and receiving in its vicinity from the S, Connal-burn and the beautiful and rapid Afton-water, it enters Dumfries-shire, and flows E to the confluence with it of the Skaar, passing the large village of Thornhill. Its banks till below Sanguhar, though redeemed from the dreariness which characterizes them in Ayrshire, consist chiefly of a verdant vale overlooked by variform but not grand or bold mountain-land; but they are afterwards exquisitely rich in all the varieties of the choicest landscape. From the confluence with it of the Skaar, it flows over a distance of 11½ m. SE by S to a point near the confluence with it of the Cairn; it then makes a bold and beautiful sweep westward; and thence, over a distance of 8 or 8½ m., runs nearly due S to the Solway frith. About 2½ m. below Dumfries, it begins slowly to expand into an estuary, and between Craighoeck-rocks and Caerlaverock-castle, where it fairly becomes lost in the Solway frith, 4½ or 5 m. below the point of begun expansion, it attains a breadth of 2½ m. Owing principally to the tide's impetuosity, the navigation of the river is difficult to seamen unacquainted with its peculiarities; but it has been greatly improved, and is identified with considerable traffic. The Nith, exclusive of all minor bends and windings, has altogether a course of about 49 m.

NITHSDALE, the western of the three great divisions of Dumfries-shire, so named from its being drained and traversed by the river Nith. The soil in most parts is light and dry. The district even yet is of not very well-defined limits, or has along its E side much ground which is debatable between it and Annandale. The original name was Strathnith or Stranith. In 1620, Robert, 8th Lord Maxwell, was created earl of N. William, the 5th earl, took part with the Pretender in 1745, and was attainted, and condemned to be beheaded; but, through the address and courage of his countess, made an extraordinary escape from the Tower.

NITI PASS, a pass leading from Kumaon into Tibet, by the banks of the Dauli, and the ravine of the Niti river. The crest of the pass is 16,814 ft. above sea-level. The village of N. is situated in N. lat. 30° 47', E long. 79° 56'.

NITON, a parish and village in the isle of Wight, 8 m. S of Newport. Area 1,397 acres. Pop. 684.

NITRA. See NEUTRA.

NITTANY, a mountain of Pennsylvania, U. S., which commences in Centre co., and extends between Lycoming and Northumberland cos., almost to the W branch of the Susquehanna.

NITTEDAL, a village and parish of Norway, 12 m. NE of Christiania. Pop. 1,458.

NITTENAU, a town of Bavaria, 12 m. WNW of Roding, on the l. bank of the Regen. Pop. 800.

NITTORE, a town of Hindostan, in the Nizam's territories, 52 m. NW of Bidur.

NIUCUNDA, a river of Sweden, which issues from a lake on the E side of the Kiolen mountains; flows through the Stor-sien lake; and enters the gulf of Bothnia, 9 m. SE of Sundsvall.

NIUERA-ELIA, or NEWERA-ELIA, an elevated plain or table-land in the island of Ceylon, 47 m. SW of Kandy. The summits of the high grounds in the interior of Ceylon frequently stretch into a considerable extent of table-land, which, when encircled by hills, presents the appearance of an extensive basin: in a situation of this description, at an elevation of 6,200 ft. above sea-level, stands the plain of N., about 4 m. in length, and $1\frac{1}{2}$ m. in breadth, on which a military station was established in 1829, as a convalescent post. The intervening space between it and Kandy has till recently been almost without inhabitants, and devoid of every kind of cultivation, but is less densely wooded than the low grounds. Though generally designated a plain, this district presents considerable inequalities of surface, being divided into two valleys by a range of hills covered with jungle, which towards the S are broken into a succession of abrupt rising grounds and ravines; to the N, however, the ground is almost uniformly level. Springs and rills of water are met with in every direction, and give a marshy character to the surface, wherever the slope is insufficient to afford free drainage. This particularly applies to the upper portion of the plain, the greater part of which is a complete morass during most of the year. On every side, the plain is encircled by lofty mountains, one of which rises 2,000 ft. above the station, and consequently must be more than 8,200 ft. above the level of the sea. These mountains, though exceedingly steep, rocky, and nearly devoid of soil, are covered to the summit with forest-trees and underwood. Most of the surface of the plain is composed of black peat, but in some parts there is a rich mould, resting on yellow clay or gravel, and covered with a coarse tufted grass. The climate, though very invigorating after the heat of the sea-coast, is too bleak and variable to be pleasant. The position, moreover, is exposed to violent gusts of wind, particularly at the change of the monsoons; and even when the rays of the sun are unclouded, a cold dry piercing wind generally prevails. To those who have been long resident in the low grounds, the mornings and evenings here are very cold, for the therm. sometimes falls to 29°, and ice is formed of considerable thickness; it seldom rises above 70°, and Europeans can take exercise, even during the hottest period of the day, without experiencing the slightest inconvenience. As may be expected from the situation, the daily variations in temp. are considerable, and often extremely sudden. N. has its wet and dry seasons, the former taking place during the SW, the latter during the NE monsoon; but no month ever passes without rain; heavy dews are also frequent in the mornings and evenings, and the station is often enveloped in dense fogs.—The district has been highly recommended to emigrants by parties well-acquainted with the locality. Mr. Sirtt, in his *Ceylon and the Cingalese*, says: "We can bear witness to the advantages offered in this mountain-district for a European settlement, and the only mat-

ter of astonishment is that so many years of British rule should have elapsed before the attempt was made. The natives, says Mr. Baker, now produce five successive crops of potatoes from the same land. Stock of all kinds is remarkably cheap, and the draught-buffalo is an animal which entirely supersedes the horse for all heavy work, not only on account of his great strength, but from the fact of his requiring no other food than pasture. Wheat has been experimented upon, and the quality produced proved infinitely superior to the seed imported, and yet Ceylon is entirely dependent upon America for the supply of flour. Oats and beans thrive well, but have been neglected, consequently the horses in the island are fed expensively upon paddy and gram, the principal portion of which is imported from India."

NIVE, a river of France, in the dep. of Basses-Pyrenees, which has its source near St.-Jean Pied-de-Port; and joins the Adour, on the l. bank, at Bayonne, after a NW course of 54 m.

NIVELLE, or NIVONNE, a river having its source in the Spanish prov. of Pampeluna, near Urdache, and flowing NW through the French dep. of Basses-Pyrenees into the bay of Biscay, after a course of 24 m. The British army under Wellington crossed it at St.-Jean-de-Luz in Nov. 1813.—Also a village of France, in the dep. of Nord, cant. of St. Amand, 9 m. NNW of Valenciennes. Pop. 1,570.

NIVELLES, NIVELLE, or NYVIL, a town of Belgium, in the prov. of S. Brabant, 17 m. S of Brussels, on the Thienne. Pop. 7,926. It has manufactories of woollen and cotton stuffs, lace, and hats; and numerous distilleries, breweries, and tanneries.

NIVERNAIS, an ancient province in the interior of France, to the W of Burgundy, and NW of Orleans. It is about 60 m. long, and 50 m. broad, and has an area of 639,806 hect. The greater part of it is now comprehended in the dep. of the Nievre. Its cap. was Nevers.—The canal of N. runs from the Loire, at the embouchure of the Aron, to the Yonne at La Choise.

NIVERNAIS BAY, a large bay at the E end of Lake Ontario.

NIVIANO, a small town of the duchy of Parma, situated on a hill not far from the Trebia, 8 m. S of Piacenza.

NIVILLAC, a commune and village of France, in the dep. of Morbihan, cant. and 2 m. NE of La Roche-Bernard. Pop. 2,350.

NIVONNE. See NIVELLE.

NIWNITZ, a town of Moravia, 3 m. SE of Ungarisch-Brod. Pop. 1,300.

NIXDORF, or GREAT NIKOLSDORF, a town of Bohemia, 27 m. ENE of Dresden. Pop. 5,000. It has considerable manufactures of linen and cotton.

NIXONTON, a township of Pasquotank co., N. Carolina, U. S., on Little River.

NIZA, a small town of Portugal, in the prov. of Alemtejo, near the Tagus, 15 m. NNW of Portalegre, between the rivulets of N. and Figueiro. Pop. 2,300.

NIZAM'S TERRITORIES. See HYDERABAD.

NIZAMPATAM, a town of India, in the prov. of the Northern Circars, 45 m. SW of Masulipatam, in N lat. 15° 56'. It carries on a considerable coasting-trade, by means of the small craft of the natives.

NIZANKOWICE, a town of Galicia, in the circle and 6 m. S of Przemysl.

NIZAO. See NISAO.

NIZIBIN. See NISIBIN.

NIZIERS (SAINT), a town of France, dep. of the Rhone, 30 m. NNW of Lyon. Pop. 1,360.—Also a village in the dep. of Ain, cant. and 4 m. E of St. Tirvier-de-Courtoux. Pop. 1,600.—Also a village in the dep. of the Loire, 9 m. N of Roannes; and another v. in the same dep., 9 m. S of Montrison.

NIZNIORO, a town of Austrian Poland, in the circle and 15 m. ENE of Stanislawow. Flints are found in the neighbourhood, and a magazine of them is or was kept at this place for the army.

NIZON, a commune and village of France, in the dep. of Finistere, 18 m. SE of Quimper. Pop. 1,380.

NIZONNE, a river of France, which rises 3 m. S of Nontron, in the dep. of Dordogne, and flows in a SW course of 36 m. to the Dronne.

NIZOVA, or **NISABAD**, a port of Southern Dagbistan, in the khanate and 30 m. ENE of Kuba, at the embouchure of the Kudial shai.

NIZZA. See **NICR**.

NIZZA-DELLA-PAGLIA, or **NIZZA-MONFERRATO**, a town of the Sardinian states, in the duchy of Montferrat, and prov. of Acqui, at the junction of the Nizza and the Belbo, 17 m. SW of Alessandria, on the provincial road conducting from Acqui to Asti. Its form is peculiar, being as nearly as possible a triangle enclosed with very solid walls; the fortifications, particularly at the angles, are of a very imposing character. It is seated in a beautiful and luxuriant plain, with vine-clad hills rising around it, and sparkling with villas, churches, and rural dwellings. It contains 637 houses, 999 families, and 4,377 inhabitants. Many improvements have been made upon it since 1815, and others are in progress and in contemplation. The territory of this district teems with almost every species of vegetation, but is most renowned for its splendid vineyards, and its wines have long attained the highest celebrity in every part of Italy. It produces a great quantity of fruit of various kinds, and is especially famous for the growth of melons. Its great strength as a fortified town, and its importance as a military position, involved it in all the miseries incident to war, through a long succession of ages. The town, or city as it is called, has many fine buildings, public and private. There are 3 parochial, and 9 other churches and convents; the civic palace, with its noble portico and lofty tower; several handsome and spacious *case*, or family palaces; a theatre, schools for the instruction of both sexes, and several benevolent institutions.

NOACOTE, a fruitful valley of Nepal, situated under the 28th parallel of N lat., and so near the mountains as to be perfectly sheltered from the N winds, on which account it is much warmer than the other parts of Nepal, and produces all the fruits of the more southern provinces, and a quantity of sugar.—Its capital of the same name, 17 m. NW of Katmandu, is not of great extent, but contains some of the largest and best-looking houses in Nepal, and a celebrated Hindu temple, dedicated to Bhavany. Its situation is of importance, as commanding the only entrance in this quarter from Tibet, and standing close to Mount Dhybun, by which the Chinese army was obliged to descend in 1792, when they invaded Nepal.

NOAGOR, a town of Hindostan, in Gundwana, at the confluence of the Mehe and Hetsu, 45 m. SSE Bottanpur.

NOAILLAN, a commune and village of France, in the dep. of Gironde, cant. and 2 m. N of Villandraut. Pop. 2,200.

NOAILLES, a village of France, in the dep. of Correze, cant. and 4 m. S. of Breves. Pop. 650.—Also a v. in the dep. of Oise, 9 m. SE of Beauvais.—Also a v. in the dep. of Tarn, cant. and 4 m. S of Cordes.

NOALE. See **NOVALE**.

NOALEJO, a town of Spain, in the prov. and 21 m. SSW of Jaen. Pop. 1,900.

NOANAGUR, a district of Hindostan, in the prov. of Gujerat, near the S side of the gulf of Cutch, on the l. bank of the Nagne. The soil is stony, but

produces sugar-cane, and good crops of grain and cotton. The inhabitants are principally Hindus, whose chief retains the ancient title of *jam*.—The capital is a large town defended by a stone wall, with round towers and a ditch. A considerable proportion of its pop. are weavers, and manufacture very beautiful cloths, which are exported to Surat and other places. The river Nagne, which flows past the town, is supposed by the natives to possess some qualities peculiarly favourable for the dyeing of cotton cloths, for the excellence of which this place is celebrated. In 1808, the jam of N. entered into a treaty with the British, by which he engaged that his subjects should refrain from piracy.

NOANAMA (**SAN JOSEPH DE**), a settlement of New Granada, in the prov. of Choco, on the shore of the river San Juan, 170 m. N of Popayan.

NOAN-JEDDU, a town of Hindostan, in the prov. of Gujerat, 48 m. E of Surat.

NOARA, a town of Sicily, in the prov. and 33 m. WSW of Messina. Copper and lead are wrought in the vicinity.

NOBA, a small island in the Eastern seas, near the W coast of Aru, in S lat. 5° 5'.

NOBBER, a parish of co. Meath, 12 m. WNW of Navan. Area 10,488 acres. Pop. 2,295.—The village of N., 5 m. ENE of Moynalty, was the birth-place, in 1670, of Carolan, the last of the Irish minstrels.

NOBEL, a town of Russia, in the gov. of Minsk, 24 m. SW of Pinsk, on the r. bank of the Stokhod.

NOBLE, a county in the NE part of Iowa, U. S., intersected by the Elkhart and Tippecanoe rivers. Area 432 sq. m. Pop. in 1841, 2,702.—Also a township in Morgan co., in Ohio. Pop. in 1841, 1,308.—Also a township in Shelby co., in Ohio. Pop. 1,394.

NOBLEBOROUGH, a township of Lincoln co., Maine, U. S., 174 m. NE of Boston. Pop. 2,210.—Also a township of Herkimer co., New York, on the NW side of Canada creek.

NOBLEJAS, a town of Spain, in the prov. and 30 m. NE of Toledo. Pop. 1,800. The surrounding country is fertile in olives and vines.

NOBLESTOWN, a village of Alleghany co., in Pennsylvania, U. S., 10 m. SW of Pittsburg.

NOBLESVILLE, the capital of Hamilton co., in Iowa, U. S., 20 m. NE of Indianapolis, on White river.

NOBRA, a town and district of Tibet, in N lat. 34° 38', at an alt. of 11,000 ft. above sea-level. The Shay-yok, an affluent of the Indus, has its origin in a lake or a glacier in this district.

NOBRE (**LA**), a commune and village of France, in the dep. of Cantal, cant. and 3 m. N of Champs. Pop. 1,650.

NOCARA, a town of Naples, in the prov. of Calabria-Citra, 27 m. NNE of Castrovillari.

NOCARIO, a village of Corsica, 12 m. ENE of Corte. Pop. 500.

NOCCEANO, a town of Naples, in Abruzzo-Ultra 1 ma, 9 m. S of Civita-di-Penne. Pop. 770.

NOCE, a town of France, in the dep. of the Orne, 30 m. E of Alençon. Pop. 1,375; of cant. 10,600.

NOCEDA, a village of Spain, in the prov. and 27 m. SE of Villafraña, near the r. bank of the Cabrera. Pop. 579.

NOCERA, or **NUCERIA-CAMELLARIA**, a town of the States of the Church, in the duchy of Spoleto, 5 m. SW of Ancona, and 15 m. W of Camerino, in N lat. 43° 6'. It suffered severely by an earthquake in 1751, and does not now contain above 900 inhabitants. It is still, however, the see of a bishop, and is celebrated for its baths.

NOCERA, a town of Naples, in Calabria-Ultra 2da, 20 m. SSW of Cosenza. Pop. 2,800.

NOCERA-DE-PAGANI, or **NUCERIA-ALFATERNA**, a town of Naples, in Principato-Citra, on the Sarno, 9 m. NE of Salerno. It is a place of some antiquity. After its destruction by Roger of Normandy, in the 11th cent., the inhabitants, instead of rebuilding the town on its former site, continued to occupy the surrounding villages, which they gradually extended, and embellished with a number of handsome edifices; hence the present town, instead of being surrounded with ramparts, presents to the eye scattered groups of houses, pleasantly intermingled with rural scenery. Its pop. amounts to about 6,800. It is the see of a bishop, and contains a number of churches and convents.

NOCHIZTLAN, the capital of a district in the Mexican state of Zacatecas, 60 m. NW of Oaxaca, containing 164 families of Spaniards, Mulattoes, and Indians, engaged in the cultivation and commerce of grain; and in the manufacture of woven stuffs.

NOCI, a canton and town of Naples, in the prov. of Terra de Bari, 27 m. N of Tarento. Pop. 8,000.

NOCIGLIA, a village of Naples, in the prov. of Terra-d'Otranto, 21 m. E of Gallipoli.

NOCKAMIXON, a township of Bucks co., in Pennsylvania, U. S., 14 m. N of Doylestown. Pop. 2,000.

NOCKHOLT, a parish of Kent, 5 m. W of Seven-Oaks. Area 1,683 acres. Pop. 578.

NOCOR, a small river of Morocco, which falls into the Mediterranean, in N lat. 35° 15'.

NOCTE (LA), a village of France, in the dep. of Nièvre, cant. and 4 m. SSE of Tours, on an arm of the Cressone. Pop. 704.

NOCTON, a parish of Lincolnshire, 7 m. SE of Lincoln. Area 5,340 acres. Pop. 510.

NODAWA, a river of Louisiana, which falls into the Missonri, on the E side, in the NW part of the state. It has a S course; and is about 70 yds. wide above its mouth.

NODDLE'S ISLAND, a small, pleasant, and fertile island in Boston harbour, Massachusetts, U. S., about 2 m. ENE of the town, on the Chelsea shore. A strong fortress has been built on it.

NODEAH. See **NUDEA**.

NODHA, a village of Mekran, in Persia, 63 m. SW of Kej.

NODHEA, a village of Kerman, in Persia, 75 m. NNE of Kirman.

NODJIBABAD, a town of Hindostan, in the district and 90 m. NE of Delhi.

NODZ, a village of France, in the dep. of Doubs, 18 m. SE of Besancon. Pop. 500.

NOE, a village of France, in the dep. of Haute-Garonne, cant. of Carbonne, 21 m. SSW of Toulouse. Pop. 600.

NOEL ISLANDS, a group of small islands, in the Mergui archipelago, in N lat. 10° 45', E long. 96° 38'.

NOESA-BARON, an island in the Eastern seas, near the S coast of Java, in S lat. 8° 39', about 25 m. in circumf.

NOESA-CAMBAZ, or **PULO-CANNIRAZ**, an island in the Eastern seas, near the S coast of Java, in S lat. 7° 42'. It is about 45 m. in circumf.

NOESA-COMBA, a small island in the Eastern seas, to the SE of Borneo, in S lat. 5° 17'.

NOESA-LAOUT, a small island in the Eastern seas, near the S coast of Ceram, in S lat. 3° 40'.

NOESA-NESSING, a small island in the Eastern seas, near the E extremity of Timor, in S lat. 8° 20'.

NOESA-SERAS, four small islands in the Eastern seas, in about S lat. 5° 15'.

NOGAIS, a people of Tartar origin, located in the S of Russia, chiefly in the W part of the gov. of Caucasus, the N part of Tau-

rida, and the S part of Yekaterinoslav. They are divided into several hordes or tribes. Those on the Kuban, in the W part of Caucasus, are called Little N., or Black N., and amount to about 10,000 families. See article **TARTARS**.

NOGALES, a town of Spain, in the prov. and 27 m. SE of Badajoz. Pop. 800.—Also a town of Spain, in the prov. and 45 m. N of Palencia.

NOGARA, a small town of Austrian Italy, in the prov. of Verona, on the Tartaro.

NOGARO, a town of France, in the dep. of Gers, on the Nidon, 21 m. WSW of Condom. Pop. 1,390; of cant. 14,074.

NOGAT, a river of Prussia, which branches off from the Vistula; passes by Marienburg, and joins the Frische-haf about 6 m. N of Elbing. The island thus formed by the two branches of the Vistula and the Baltic with its bays, is also called Nogat. It is fertile, and of considerable extent. The N. is connected with the Elbing by a canal.

NOGENT L'ARTAUD, a town of France, in the dep. of Aisne, on the Marne, 6 m. S of Chateau-Thierry. Pop. 1,200.

NOGENT-LE-BERNARD, a town of France, in the dep. of the Sarthe, 18 m. NNE of Le-Mans. Pop. 3,000.

NOGENT-LE-ROI, a canton and town of France, in the dep. of the Marne, 12 m. N of Chartres. Pop. of town 2,079; of cant. 11,976. The town is celebrated for its cutlery.—Also a town and cant. in the dep. of Eure-et-Loir, 10 m. SE of Dreux. Pop. of town 1,300; of cant. 11,439.

NOGENT-LE-ROTHOU, a canton and town of France, in the dep. of the Eure-et-Loir, 27 m. SW of Chartres. It has considerable manufacturing establishments. Pop. of town 7,000; of cant. 12,715.

NOGENT-SUR-MARNE, a town of France, in the dep. of Seine, 6 m. E of Paris, on the r. bank of the Marne. Pop. 1,828.

NOGENT-SUR-SEINE, a canton and town of France, in the dep. of Aube, situated on the l. bank of the Seine, which here becomes navigable, 29 m. NW of Troyes. Pop. 3,383. It is not well-built, but has manufactories of stockings, and a considerable trade with Paris by the river, chiefly in wine and corn. It was the scene of actions between the French and the Allies, on the 9th and 10th February, 1814.—The arrond. has an area of 85,000 hect., with a pop. in 1841 of 84,785. It comprises 4 cant.

NOGENT - SUR - VERNISSON, a village of France, in the dep. of Loiret, cant. and 6 m. NW of Chatillon-sur-Loing. Pop. 830.

NOGHE, a village of Sennaar, on the r. bank of the Nile, 50 m. NE of Sennaar.

NOGUEIRA, a town of Brazil, in the prov. of Para, on the l. bank of the Tefe, near its confluence with the Amazon.—Also a town of Portugal, in the prov. of Estremadura, comarca and 7 m. W of Setaval. Pop. 1,600.

NOGUEIRA-DO-CABO, a town of Portugal, in the prov. of Beira, comarca and 24 m. W of Lamego. Pop. 600.

NOGUERAS, a village of Spain, in the prov. and 36 m. S of Saragossa. Pop. 550.

NOHANENT, a village of France, in the dep. of Puy-de-Dome, cant. and 3 m. NNW of Clermont-Ferrand. Pop. 1,125.

NOHOVAL, or **NOGHEVAL**, a parish in cos. Westmeath and Longford, 4½ m. NW by W of Ballymore. Area of Westmeath section 11,588 acres, of which 2,391 acres are in Lough Ree. Area of the Longford section 3,563 acres. Pop. in 1831, 4,154; in 1851, 3,273.—Also a parish, containing a village of the same name, on the coast of co. Cork, 4 m. E of Kinsale. Area 2,568 acres. Pop. in 1831, 1,260; in 1851, 709.—Also a parish in co. Clare, 2½ m.

NE of Killenora. Area 4,661 acres. Pop. in 1831, 408; in 1851, 243.

NOHOVAL-DALY, a parish in cos. Cork and Kerry, 6½ m. NW by W of Mill-street. Area of the Cork section, 11,344 acres; of the Kerry section, 5,829 acres. Pop. of the whole, in 1831, 3,229; in 1851, 3,036. The surface consists of a portion of the glen or vale of the river Blackwater, almost immediately below that river's source, and portions of the mountainous screens of the vale within both Cork and Kerry.

NOHOVAL-KERRY, a parish in co. Kerry, 2½ m. W of Castle-Island. Area 3,204 acres. Pop. in 1831, 853; in 1851, 628.

NOIA, a town of Naples, in the prov. and 9 m. S by E of Bari.

NOIDAN-LE-FERIOUX, a village of France, in the dep. of Haute-Saône, cant. and 6 m. S of Scey-sur-Saône. Pop. 820.

NOIL, or **NAYAH**, a river of Hindostan, in the prov. of Coimbatore, which descends from the W. Ghats, and flows E to the Cavery, which it joins on the r. bank, near Vaylur.

NOIR (CAPE), a cape on the W coast of Tierra-del-Fuego, in Cockburn channel.—Also a cape on the N side of Chaleur-bay, in the gulf of St. Lawrence, about 7 leagues WNW of Bonaventura.

NOIRETABLE, a town of France, in the dep. of Loire, 23 m. W of Montbrison. Pop. 1,880; of cant. 8,321.

NOIRMOUTIERS (ILE DE), an island of France, on the coast of Brittany, in the bay of Bourgneuf, belonging to the dep. of La Vendée. Its superficial extent is about 70 sq. m. Pop. in 1841, 7,590. Its surface is low, the N part being little elevated above the level of the sea at high water, and the S somewhat below it, but protected on the E side by dikes, on the W by downs or natural sand-hills. The soil is very productive, and corn and cattle are exported annually. Bay salt is made on the coast. The chief town, on the NE coast of the island, contains 1,600 inhabitants, and has a shallow harbour fit for coasters of 50 or 60 tons.

NOISY-LE-GRAND, a village of France, in the dep. of Seine-et-Oise, cant. of Gonesse, 9 m. E of Paris. Pop. 1,100.

NOISSY-LE-SEC, a village of France, 4 m. NE of Paris. Pop. 1,500.

NOIX (ISLE AU), or **NUT ISLE**, a small isle, of 50 acres, near the N end of Lake Champlain, and within the prov. of Lower Canada.

NOIX (LAC), a lake of the United States, in Louisiana, about 50 m. in circumf., which discharges its waters into the Bayou-Rigula-de-Bondieu, which joins Red river, 3 m. above Natchitoches. The outlet of the lake is navigable for boats most of the year.

NOIZAY, a town of France, in the dep. of Indre-et-Loire, 6 m. NW of Amboise. Pop. 1,100.

NOJA, a town of Naples, in the prov. of Basilicata, 15 m. SW of Tursi. Pop. 1,446.—Also a town of Naples, in the prov. of Terra-di-Bari, cant. and 3 m. NNW of Rutigliano. Pop. 4,700.

NOLA, a town of Naples, in the Terra-di-Lavoro, 15 m. ENE of Naples. Pop. 8,850. It is a gloomy and deserted place; the houses are badly built, and the streets wretchedly paved. It is the see of a bishop, and has an episcopal seminary and a military hospital. Under the Romans it was a flourishing colony, and numbers of fine Etruscan vases are still found in it. Silk is raised in the neighbourhood.

NOLAY, a town of France, in the dep. of Cote-d'Or, 10 m. SW of Beaune, and 14 m. SE of Arnay-le-Duc. Pop. 2,000. It has considerable trade in wines, grain, and wool.—Also a village of France,

in the dep. of Nievre, cant. and 12 m. ENE of Pougyes. Pop. 1,300.

NOLI, a town of the Sardinian states, situated on the coast, 30 m. SW of Genoa. Pop. 800. It is the see of a bishop, whose diocese is united with that of Savona.

NOLI (CAPE), a cape in the NW of Italy, on the Genoese coast, in N lat. 44° 13'.

NOLINSK, a town of Russia, in the gov. of Viatka, 120 m. NNE of Kazan, on the r. bank of the Kurtshum. Pop. 1,200.

NOLLENDORF, a village of Bohemia, 22 m. S by E of Dresden, and 2 m. NE of the village of Culm.

NOMAES, or **NOMAO**, a town of Portugal, in the prov. of Beira, 6 m. SE of St.-Jono-de-Pesqueira.

NOMAIN, a village of France, in the dep. of Nord, 12 m. NE of Douai. Pop. 2,126.

NO-MAN'S-LAND, a small island near the coast of Massachusetts, U. S., in N lat. 41° 15', a little to the SW of Martha's Vineyard. It belongs to Duke's co.

NOMBELLA, a town of Spain, in the prov. and 24 m. SE of Madrid. Pop. 1,400. It has extensive manufactories of coarse earthenware.

NOMBRE-DE-DIOS, a town of Mexico, in the intendency of Durango, 170 m. N of Guadalupe. There is another settlement of the same name in Mexico, 36 m. WNW of Chihuahua.—Also a port of New Granada, 45 m. NE of Panama, in N lat. 9° 36', at the bottom of a bay to which it gives name. This town was destroyed in its infancy by the Indians of Darien; but was rebuilt, and the inhabitants maintained their ground till 1584, when orders arrived from Philip II. for their removing to Portobello, as being better situated for the commerce of that country.—Also a river of Peru, in the prov. of Arequipa, which runs into the Pacific ocean, in S lat. 17° 10'.

NOM-DE-JESUS, a town of the island of Zebu, one of the Philippine islands, see of a bishop, suffragan of Manila.

NOMENOGNO, a small town of the Sardinian states, in the Milanese prov. of Novara.

NOMENY, a town of France, in the dep. of Meurthe, situated on a height near the Seille, 14 m. N of Nancy. Pop. 1,332; of cant. 12,735.

NOMEXY, a commune and village of France, in the dep. of Vosges, cant. of Chatel-sur-Moselle. Pop. 577.

NOMI, a town of Nifon, in Japan, 16 m. NE of Kanasava.

NOMISNY-BAY, a bay in the river Potomac, on the coast of Virginia, U. S., in N lat. 38° 11'.

NONA, a small town of Dalmatia, situated on an island near the coast, in N lat. 44° 14', 7 m. NE of Zara. Pop. 600. It was formerly called *Onona* or *Ononum*, but is now completely decayed. Unfortunately the harbour also, though once good, is now filled up and has become a marsh.

NONAC, a village of France, in the dep. of Charente, cant. and 4 m. WNW of Montmoreaux. Pop. 1,150.

NONANCOURT, a town of France, in the dep. of the Eure, on the small river Arve, 12 m. S of Verneuil. Pop. 1,345; of cant. 9,278.

NONANT, a village of France, in the dep. of Orne, 12 m. E of Argentan. Pop. 860. It has bottle-works.

NONANTOLA, a town of the duchy of Modena, on the r. bank of the Panaro, 8 m. NW of Modena.

NONARPE, a town of Spain, in the prov. and 64 m. SE of Saragossa. Pop. 1,023.

NONCELLO-ET-MEDUNA, a river of Austrian Lombardy, rising 3 m. NE of Pordenone, and join-

ing the Livenza on the L. bank, after a SSE course of 15 m.

NONE, a town of Piedmont, 12 m. SSW of Turin, on the E bank of the Torton. Pop. 1,620.

NONESUCH, a harbour at the E end of the island of Antigua, in N lat. 17° 5'. The road is foul and full of rocks, and generally shallow.

NONETTE, a village of France, in the dep. of Puy-de-Dôme, cant. and 3 m. ENE of Saint-Germain-Lembron. Pop. 700.

NONINGTON, a parish of Kent, 4 m. S of Wingham. Area 4,081 acres. Pop. 875.

NONO (CAPE), a promontory on the W coast of the island of Ivica, in the Mediterranean, in N lat. 39° 3'.

NONTRON, a town of France, in the dep. of Dordogne, 24 m. N of Périgueux. Pop. in 1841, 3,609; of cant. 14,985. It has manufactories of leather and cutlery; and there are iron mines and forges in the neighbourhood.—The arrond., comprising 8 cant., with an area of 170,768 hectares, had a pop. of 83,889 in 1841.

NONURA, a small uninhabited island in the Pacific, off the coast of the prov. of Piura, in Peru, to the N of that of Lobos.

NOORDBROCK, a town of Holland, in the prov. and 12 m. E of Groningen. Pop. 1,270.

NOORDWOLDE, a town of Holland, in the prov. and 4 m. N of Groningen. Pop. 1,000.

NOORDWYK-BINNEN, a village of Holland, in the prov. of S. Holland, 6 m. NNW of Leyden. Pop. 1,800.

NOOTKA SOUND, a bay of the North Pacific, on the W coast of North America, discovered by Cook, in 1778. The entrance is situated in the E corner of Hope bay, in N lat. 49° 53', E long. 233° 12'. The E coast of Hope bay, from Breakers point to the entrance of the sound, is covered by a chain of sunken rocks, which seem to extend some distance from the shore. The entrance into the sound is between two rocky points, that lie ESE and WNW from each other, distant between 3 and 4 m. Within these points, the sound widens considerably, and extends to the N, four leagues at least, exclusive of the several branches toward its bottom. In the middle of the sound are a number of islands of various sizes. The depth of water in the middle of the sound, and even close to some parts of its shore, is from 47 to 90 fath. The harbour and anchoring-places within its circuit are numerous. The land bordering upon its coast is of a middling height, and level; but within the sound it rises almost everywhere into steep hills, ending in round or blunted tops, with some sharp ridges on their sides. Cook visited this sound in April; and he mentions that even in the night the thermometer fell lower than 42°, while in the day it very often rose to 60°.—The trees which chiefly compose the forests, are the Canadian pine, the white cypress, the wild pine, and two or three other sorts of pine less common. The wood is all of a large size. Of animals, the most common were bears, deer, foxes, and wolves. The foxes are of several varieties; some of their skins being quite yellow, with a black tip to the tail; others of a deep or reddish yellow; intermixed with black; and a third sort of a whitish or greyish colour, also intermixed with black. The pine martin and the ermine occur. The racoons and squirrels are of the common sort; but the latter is rather smaller than ours, and has a deeper rusty colour running along the back. To these may be added the lynx or wild cat, the moose deer, and the buffalo. The sea-animals seen off the coast were whales, porpoises, seals, and sea otters. Birds in general are not only rare as to species, but few in numbers. Those which chiefly frequent the woods are crows and ravens; a bluish jay or magpie, common wrens, the Canadian or migratory thrush. The birds which frequent the waters and shores are gulls, snags, wild ducks of two sorts, plovers, and swans. The only animals of the reptile kind observed here, and found in the woods, were brown snakes about 2 ft. long, with whitish stripes on the back and sides, which seemed to be harmless; and brownish water-lizards. The insect tribe are butterflies, bees, moths, and mosquitoes. The persons of the natives are in general under the common stature; but commonly pretty full or plump, though not muscular. Their visage is round and full, and sometimes also broad, with high prominent cheeks; the nose is flattened at its base with wide nostrils. The forehead is rather low, the eyes are small and black; the mouth round, with large round thick lips; the teeth tolerably equal and well set. Their colour it is difficult to determine, as their bodies are always so incrustated with paint and dirt; though, in particular cases, when these were well rubbed off, the whiteness of the skin appeared almost equal to that of Europeans! Their common dress is a flaxen mantle, ornamented on the upper edge by a narrow strip of fur, and at the lower edge by fringes or tassels. Besides the above dress, which is common

to both sexes, the men frequently throw over their other garments, the skin of a bear, wolf, or sea-otter, with the hair outward, and tie it as a cloak, near the upper part, wearing it sometimes before and sometimes behind. Two towns or villages seem to be the only inhabited parts of the sound. The chief employment of the men seems to be that of fishing, and killing land and sea animals for the sustenance of their families. The women manufacture their flaxen or woollen garments, and prepare the sardines for drying.

In the year 1786, an association of British merchants residing in the East Indies was entered into, and a small settlement was formed on this sound for the purpose of obtaining furs; but the settlement was seized by the Spaniards in 1789, and two vessels sent to Mexico, where they were set at liberty by the viceroy, on the supposition, as he declared, that nothing but ignorance of the rights of Spain could have induced other nations to attempt an establishment on that coast. A war between Great Britain and Spain in consequence of the outrage was only avoided by mutual concession and explanation, in what is called the Nootka-sound convention,—a document the importance of which was recently revived by the discussions with the United States government relative to Oregon, in which England claimed the valley of the Columbia river and the coast to the S of Vancouver's island, on the authority of discoveries by Cook, Vancouver, and Mackenzie; of the Nootka-sound convention in 1790 with Spain, and of settlements effected and maintained at different times by British subjects; while the United States claimed the territory on the ground of discoveries made by her citizens Gray, Kendrick, &c.; of the cession made by Spain in 1819, and of occupation and settlements previously, as well as afterwards, effected by American traders. In the present instance, the honours of discovery appear to be due to a Spanish navigator of the 17th cent., Juan-de-Fuca, who has given his name to the strait that separates Vancouver's island from the mainland. The American ministers asserted that not only the valley of the Columbia, but the whole of the Oregon territory, and territory as far as the 52d parallel of N lat., belonged to Spain, and was by Spain transferred to the United States at the treaty of Florida in 1819; and took credit to themselves for moderation in proposing the 49th parallel as a boundary-line. The question therefore arose, which is the better claim,—that which is founded on the treaty by Spain with England in 1790, or that which rests on the Florida treaty with the United States in 1819? "By the former Spain agreed to give indemnity to British subjects dispossessed of their settlements about Nootka-sound, and to guarantee the same liberty of access to the citizens of both nations, 'as well in those parts which were to be restored to British subjects,' as in the other parts of N. America which then belonged to Spain. By the latter she ceded all her authority and jurisdiction over her provinces in N. America to the United States. Now, when it is recollected that in 1789 Spain abandoned her settlements in Nootka-sound, and that from this time she appears to have neglected this portion of her colonial empire altogether, it seems a very questionable doctrine to hold that any treaty made thirty years afterwards could transfer to another nation possessions left and recognised as left in the hands of Englishmen. The only parties to the treaty of 1790 were England and Spain. The country which was the subject of the treaty was afterwards abandoned by Spain. The parties expressly mentioned in the treaty as to be 'indemnified' and 'restored' were English. It seems difficult to avoid one of two conclusions on premises like these, viz., that the property and possession of this district were virtually ceded to England, or that Spain and England were to hold it on terms of joint occupancy. In the former case Spain could have no right whatsoever to transfer it by a treaty made thirty years afterwards; in the other she could only surrender the moiety of her possessions and rights which she shared with England. In neither case could the United States claim the exclusive sovereignty of the Oregon territory."

NOQUET'S BAY, a bay on the NW coast of Lake Michigan, to the N of Green bay, 45 m. long, and 18 m. wide.

NORA, a town of Sweden, in the prov. of Westermanland, 28 m. NNW of Upsal, on the W bank of a small lake of the same name. Pop. 700.

NORA (LA), a town of Spain, in the prov. and 3 m. W of Murcia, on the l. bank of the Segura. Pop. 1,800.

NORAN, a clear and rapid stream of Forfarshire, which rises among the Grampians and falls into the South Esk.

NORBURG, or **NORDBURG**, a seaport of Denmark, in the island of Alsens, in N lat. 55° 3'. Pop. 900.

NORBURY, a chapelry and township in Stockport p., Cheshire, 3½ m. SE by S of Stockport, on a branch of the Mersey, and intersected by the Manchester and Birmingham railway. The inhabitants are chiefly occupied in the weaving of silk and cotton. Considerable numbers also find employment in the extensive coal-mines in the neighbourhood. Area 1,410 acres. Pop. in 1831, 671; in 1851, 848.—Also

a township in Marbury p., Cheshire, 7 m. SW by W of Nantwich, in the line of the Ellesmere canal. Area 1,533 acres. Pop. in 1851, 403.—Also a parish in Derbyshire, 4 m. SW by W of Ashborne, on the river Dove. Area 2,242 acres. Pop. in 1831, 465; in 1851, 475.—Also a parish in Salop, 4 m. NNE of Bishop's-Castle. Area 4,584 acres. Pop. in 1831, 382; in 1851, 373.—Also a parish in Staffordshire, $4\frac{1}{2}$ m. SW by S of Eccleshall, intersected by the Birmingham and Liverpool Junction canal. Area 3,313 acres. Pop. in 1831, 370; in 1851, 358.

NORCIA, a town of the States-of-the-Church, in the deleg. and 18 m. E of Spoleto, on the Freddara. Pop. 3,530. It has a trade in wine, oil, and truffles. It occupies the site of the ancient *Nursia*. In 1730 it suffered severely by an earthquake.

NORD, a department in the NE of France, including the chief part of the ancient divisions of French Flanders, Hainault, and Cambresis, and forming more than half the line of French frontier towards Belgium. It is bounded on the N by the North sea; on the NE and E by Belgium; on the S by the depts. of L'Aisne and La Somme; on the W by that of Pas-de-Calais. It lies between the parallels of $49^{\circ} 57'$ and $51^{\circ} 5'$. Its length from E to W, extending inland from the sea, is 120 m. It has an area of 569,904 hectares, or 2,278 sq. m. Pop. in 1841, 1,085,298; in 1851, 1,158,285. In 1801 the pop. was 765,000. It holds a leading rank in wealth and revenue, containing the large towns of Lisle, Dunkirk, Valenciennes, Cambrai, and Douay, and exhibiting, both in the state of its agriculture, and the comfort of the lower orders, the superiority so long ascribed to the Flemish above the French provs. Its surface is chiefly comprised in the basin of the Scheldt; on the E it belongs to that of the Meuse; on the W, to the Aa and the Yzer. Its chief streams are the Scheldt, and its affluents the Haine, Scarpe, Senece, Lys, Law, and Deule; and the Sambre, the Aa, the Colme, and the Yzer. All these streams, from the level character of the surface, are of slow course. The highest point of surface does not exceed 200 metres = 218 yds. The coasts are bordered with sandy downs like those of Holland; and present the two ports of Gravelines and Dunkirk. The soil is highly productive in all kinds of corn, as well as in flax, tobacco, beet-root, colza, chicory, and hops. About 250,000 hectares are rich soil; 150,000 calcareous; 25,000 hilly; 15,000 sandy; and 15,000 marshy. The pasturages are rich, especially along the Sambre. The largest farms are in the vicinity of Douay. In 1839 the live stock consisted of 79,177 horses; 226,338 oxen; 210,834 sheep; 73,810 pigs; and 6,638 goats. The annual produce of wool is 750,000 kilog. The butter and cheese of Bergues and Maroilles are celebrated. Of mineral productions the chief are coals, of which about 7,500,000 quintals are annually raised. The manufacturing establishments are very extensive. The chief are of linen, woollen, and cotton stuffs, lace, paper, soap, and leather. There are likewise considerable iron and glass-works in the dep., and numerous distilleries, breweries, beet-root sugar manufactories, and salt-refineries.—The dep. is administratively divided into the 7 arrondissements of Lisle, Avesnes, Cambrai, Douay, Dunkirk, Hazebrouck, and Valenciennes; which are subdivided into 44 cantons, and 661 communes. It forms the dio. of the archb. of Cambrai.—In 1834 it sent 12 deputies to the legislature, who were nominated by 6,005 electors. In 1842 it possessed 43 secondary educational establishments, with 1,913 pupils, a royal college at Douay, and 17 communal colleges. In 1840 there were 71 superior primary schools, with 2,317 pupils, and 1,450 elementary schools, attended by 98,286 children.

NORD (RIVIERE DU), a river of Lower Canada, in the co. of York, which joins the Ottawa, on the r. bank, after a SSW course of 30 m.

NORDALEN, a parish and village of Norway, in the bail. of Romsdal, 30 m. S of Moide.

NORDEN, a town of Hanover, in E. Friesland, about 2 m. from the North sea, on which it has a small but good harbour, 15 m. N of Embden. Pop. 5,600. It has manufactories of linen yarn, tobacco, and soap. It is united with its port by a small canal.

NORDENBURG, a town of East Prussia, on a small lake, 55 m. SSE of Königsberg, in N lat. $54^{\circ} 19'$. Pop. 2,350.

NORDERHAUG, a parish and village of Norway, 20 m. NW of Christiania. Pop. of p. 6,400.

NORDERNEY, an island of Hanover, on the coast of E. Friesland, 20 m. NW of Aurich, in N lat. $53^{\circ} 43'$. It is only 7 m. in circumf. The inhabitants, in number 600, are employed chiefly in fishing and navigation. It is much frequented for sea-bathing.

NORDEROOG, an island of Denmark, to the W of Pelivorum, in N lat. $54^{\circ} 32'$, E long. $8^{\circ} 30'$. It is inhabited by myriads of the sea-fowl *Sterna Catiana*.

NORDGAU, an ancient division of Germany, which in the Middle ages was extensive, but at present is confined to the external part of the principality of Neuburg, or the district between Bavaria proper and the Upper palatinate. See *Neuburg*.

NORDHALBEN, a town of Bavaria, 39 m. NNE of Bamberg. Pop. 1,300.

NORDHAUSEN, a considerable town of Prussian Saxony, in the gov. of Erfurt, on the river Zorge, 30 m. SSW of Halberstadt. It is fortified with a wall flanked by towers; and contains a Catholic and several Lutheran churches, an orphan-house, 3 hospitals, and 13,000 inhabitants. The chief trade consists in the distillation and sale of spirits. A few years ago, it was calculated that 200 stills in this town and its vicinity consumed annually 300,000 bushels of corn; and that the value of the spirits sent out of the town for sale was about £60,000, exclusive of duty; while nearly 1,000 head of cattle and 10,000 swine were fed on the refuse of the stills. Here are also oil-mills, which prepare oil to an annual value of £30,000 or £40,000; likewise tanneries, and manufactories of linen, woollen, hardware, and soap. A fine marble from the adjacent district of Hohenstein is made here into a number of different articles.

NORDHAUSEN, a commune and village of France, in the dep. of Bas-Rhin, 16 m. NE of Schelestat. Pop. 1,033.

NORDHEIM, a village of Bavarian Franconia, at the foot of the mountain called the Rhoen, 7 m. N of Bischoffsheim. Pop. 800.—Also an old town of Hanover, at the confluence of the Ruhme and the Leine, 12 m. N by E of Gottingen. It is surrounded with a wall, and is tolerably well-built. Pop. 4,033.—Also a village of Saxe-Weimar, on the Fulda, NE of Eisenach. Pop. 1,400.

NORDHOLZ, a village of Hanover, in the gov. and 39 m. WNW of Stade, near the E bank of the estuary of the Weser.

NORDHORN, a village of Hanover, in the gov. and 45 m. WNW of Osnabruck, on the Vechte. Pop. 900.

NORDKÖPING, NORKÖPING, or NORDKÖPING, a town of Sweden, in the laen of Linköping, on the river Motala, between Nyköping and Linköping, 76 m. SW of Stockholm. Pop. 11,040. It is well-situated for trade, vessels coming up to it by means of the river, where a commodious quay is erected. In 1849, 137 vessels from foreign ports arrived with full cargoes, and 98 cleared. It has broad and straight streets, and some public buildings worth notice. It

has manufacturing establishments for iron and brassware, fire-arms, and leather, also woollens, tobacco, and paper. The town was greatly damaged by a Russian squadron in 1719.

NORLAND, or **NORRLAND**, a maritime province of Norway, lying between Finnmark or Norwegian Lapland on the N, and Trondheim on the S. It extends from the 66th to the 70th parallel of N lat. Its extent, including the adjacent Lofoden islands, is computed at 46,000 sq. m. Corn is cultivated to a small extent in some favoured districts. The breed of cattle, though small, is good; and butter and cheese are exported; but the land is in general very poor, and the pop. thin. The majority of the inhabitants are fishermen, and trade with Bergen and other towns to the S. The pop. in 1845, comprising that of the amt of Finnmarken, was only 102,844. See article **NORWAY**.

NORILAND, or **NORRLAND**, the most northern of the three old divisions of Sweden, comprising the 7 provs. of Gestrícia, Helsingland, Herjedalen, Medelpad, Jamtland, Angermannland, and W. Bothnia. It extends from the 60th to the 65th parallel of N lat., and is bounded by Lapland on the N; the gulf of Bothnia on the E; Middle Sweden on the S; and Norway on the W. In the most extensive acceptance of the name, N. includes Swedish Lapland, making the country comprised in it extend to the 68th parallel. By a late repartition, it was divided into the 3 gows. of Umea, Hernosand, and Gefleborg. The surface is rugged throughout; and the mountains form, with those of Norway, the most extensive part of the grand Scandinavian chain. The most considerable rivers are the Indal, the Anger, the Luleå, and the Piteå, which have courses of from 200 to 300 m., but are not all navigable, and often occasion great damage to the surrounding country from inundations. Flax, hemp, and linen, form articles of export. Here are likewise a number of productive iron-mines; and large quantities of excellent timber are annually floated down the rivers. There are scarcely any towns in the interior of the country, but several along the coast; the principal and most thriving is Gefle.

NORLAND (WEST). See **HERNOSAND**.

NORLAND, or **NORDLENDINGAFJORDING**, a division of the island of Iceland, forming its N part.

NORLEDA, a parish and village of Hanover, in the gov. and 32 m. WNW of Stade. Pop. 1,300.

NORDLINGEN, an ancient town of Bavaria, in N lat. 51° 30', 36 m. NNW of Augsburg, on the Goldbach. Pop. in 1845, 6,464. It is surrounded with an earthen mound, and bastioned ramparts. It has a handsome cathedral belonging to the Lutherans, who form the greater part of the inhabitants. Its manufactures of woollens, linen, carpets, gloves, stockings, and leather are considerable; but the chief articles of trade are supplied by the vicinity, and consist of hogs, corn, and feathers,—the latter an object of importance from the very general use of down beds in Germany. The vicinity of N. has been the scene of repeated conflicts. The Imperialists received here a signal defeat from the Swedes in 1634; and not far from this was fought the indecisive battle between the French and Austrians, of 11th August 1796. This town was annexed to the Bavarian dominions in 1802.

NORDMALING, a small town and parish of Sweden, in the prov. of Angermannland, on the gulf of Bothnia, in N lat. 63° 34'. The inhabitants are chiefly employed in copper mines.

NORDSO, a lake of Norway, in the bail. of Bradsberg, into which the Tondsö, the Flodals, and the Huidsö, discharge themselves; and which discharges its own waters, by a stream of short course, into the

head of the Langesund at Porsgrund. Steamers are about to be placed on this lake and the Langesund-fjord.

NORDSTRAND, an island of Denmark, on the W side of the duchy of Sleswick, 15 m. NE of the mouth of the Eyder. Area 20 sq. m. Pop. 3,000. It was formerly of considerable size, but has suffered much by inundations, particularly by the sudden and dreadful one of 1634, when above 1,300 houses, and 6,000 persons, with 50,000 head of cattle, were swept away. The inhabitants are partly Lutherans, partly Catholics. They are employed in navigation, fishing, and agriculture.

NORE, a river partly of co. Tipperary, but chiefly of Queen's co. and co. Kilkenny. It rises among the Devil-Bit mountains in co. Tipperary, at a point 1½ m. NE of Moneygall; and flows NE, SE, and S, to a confluence with the Barrow at a point 1½ m. above New Ross. Its principal tributaries are the Tannet, the Erkin, the Dinane, the King's river, the Ballyduff, the Dobbin's Mill rivulet, Jerpoint rivulet, and Thomastown rivulet. The towns on or quite near its banks, are Borris-in-Ossory, Mountrath, Abbeyfeix, Durrow, Ballyragget, Kilkenny, Stoneyford, Thomastown, and Innistogue. It is navigable for boats from Innistogue to Thomastown.

NORE (BLACK), a cape on the coast of Somersetshire, at the mouth of the Severn, 5 m. SW of the mouth of the Avon.

NORE (THE), a noted part of the river Thames, situated E of Sheerness, at the point of a sand-bank which runs eastward from the isle of Grain. On this bank a floating-light is now fixed, at a point 4 m. NE of Sheerness, in N lat. 51° 29', W long. 0° 48'.

NORENBERG, a town of Prussia, in Pomerania, on the lake Enzig, 20 m. NE of Stargard. Pop. in 1847, 1,619.

NORFOLK, a maritime county of England, on the east coast; bounded on the NW by the Wash, which divides it from Lincolnshire; on the N and NE by the German ocean; on the SE and S by the Waveney, a brief artificial line, and the Little Ouse, which divide it from Suffolk; and on the SW and W by the Great Ouse and the Nene, which divide it from Cambridgeshire and Lincolnshire. It is so nearly surrounded by its marine and river boundary as to be almost an island; and is directly connected with the mainland only by a narrow causeway raised through the marshes near Lopham. Its form is nearly ellipsoidal, but suffers indentation from nearly the whole area of the Wash. Its greatest length from Yarmouth to the vicinity of Wisbeach in Cambridgeshire, in a direction from E by S to W by N, is 60 m.; its greatest breadth, from the vicinity of Thetford to the village of Blakeney, in a direction at right angles with the former diameter, is 40 m. Its circumf. is about 170 m.; its area, 2,024 sq. m. or 1,295,360 statute acres. In area it is the fourth co. in England, being exceeded only by Yorkshire, Lincolnshire, and Devonshire; in amount of pop. it is the ninth; and in density of pop. the twenty-sixth.

Surface.] The coast extends in a regular convex line from the mouth of the Yare on the E to the head of the Wash on the W; and is everywhere tame and monotonous, and for the most part so low as to be visible at but a small distance at sea. Hunstanton cliff, nearly 80 ft. high, a little inward from the entrance of the Wash, usually called St. Edmund's point, is the only noticeable rocky prominence. Diluvial cliffs, usually called the Mud cliffs, composed chiefly of clay and large embedded masses of chalk, extend from Happisburgh near North Walsham to the village of Weybourne W of Cromer. Much of the coast consists of continuous belts of sand slenderly tumulated with pebbles and gravel.